



Jump to: [Multiple Alignment](#) [Motif Tree](#) [Motif Matching](#)

Input file: 87 motifs loaded

Settings: Metric=PCC, Alignment=SWU, Gap-open=1000, Gap-extend=1000, -nooverlapalign

Multiple Alignment=IR, Tree=UPGMA, Matching against: JASPAR

Note: All results files are removed nightly at midnight EST. Please save your results by saving "Webpage, complete".

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## Multiple Alignment

(Consensus sequence representations shown, but multiple alignment was carried out on the matrices)

```

M0 : -----AAAAAAAAAAAAAAAA-----
M1 : -----TTTTTAAAAA-----
M2 : -----TTAAAAAAAAAAAA-----
M3 : -----GAAAAGGAAAA-----
M4 : -----GGRAAGAAA-----
M5 : -----GGGGGGGGGAGGAGGGGGGGGG-----
M6 : -----GGMAGGAAG-----
M7 : -----GGGAGAGGMAGG-----
M8 : -----GGGGGGGGGAGGGAGGGGGGGGG-----
M9 : -----GCAGCAGCCGGGG-----
M10 : -----GGGGGGGGGGGCGGGGCGGGGGG-----
M11 : -----GGGGAAGGG-----
M12 : -----GGGGGGGGGAGGGAGGGGGGGGG-----
M13 : -----GGAGGAGAG-----
M14 : -----GGGAGGGAA-----
M15 : -----CAGCAGCAGC-----
M16 : -----GGGGGGGGGTGGGG-----
M17 : -----GCAGGAAAGGGGGGG-----
M18 : -----GGGGGAGGGGAGGGGGGGGG-----
M19 : -----GGCTGCAGG-----
M20 : -----GGGAGAGGGG-----
M21 : -----GGGGGGGNGGAGCTGGGGGGGGG-----
M22 : -----GGGGAAGGG-----

```

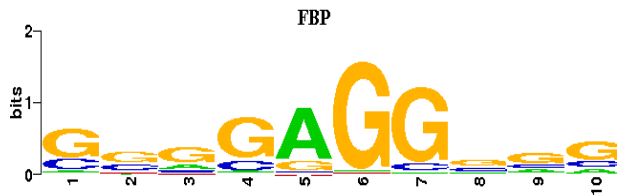
Stamp Results

04/30/14

M23: -----GGGGGGGTGGGGGTGGGGGGGGGG  
M24: -----GCTGCAGAGGC-----  
M25: -----GGAGGAAAG-----  
M26: -----TGGGGAGGGGGGGG-----  
M27: -----GGCGGCGGCGGCGGCGGG-----  
M28: -----GGCTGGAGG-----  
M29: -----GGAGCYGGGGG-----  
M30: -----GGGGGGGGGAGAGGGGGGGGGGG-----  
M31: -----GGGGGCGGGGCTGGGG-----  
M32: -----GGGGGGGGCTGGGMGCGGGGGG-----  
M33: -----GGCCGAGGCC-----  
M34: -----CCCMGCAGGCC-----  
M35: -----GGGGGAGGTGAGGC-----  
M36: -----MGGAGGGGG-----  
M37: -----GGGGGTGGGGGAGGGG-----  
M38: -----CCGCGGCCYGGAGCCGG-----  
M39: GGGGGGGGGGCGGGGCCGGGGGGG-----  
M40: -----GGGGGGCCGCGGCCGCGGCGGCGG-----  
M41: -----GWGGCCAGG-----  
M42: -----GCAGGCAGG-----  
M43: -----CCCAGAGGAG-----  
M44: -----GGGCWGAGGG-----  
M45: -----GGGGCTGGGAG-----  
M46: -----GAAGNTGGCGGCGG-----  
M47: -----CAGCCCCAGG-----  
M48: -----RGGCAGCAG-----  
M49: -----CGGAGCCCAG-----  
M50: -----GGGGGGGGMGGGGCGGGGGCGGGG-----  
M51: -----GGGGGGGGCGGAGGGCGGGGGGG-----  
M52: -----GGGAGGGGGCG-----  
M53: -----GGGCTGCGGGC-----  
M54: -----GGAGGAGCC-----  
M55: -----GGCYGAGGCCG-----  
M56: -----GCSCAGGCGC-----  
M57: -----GCAGGTGAGCGGGGGGG-----  
M58: -----AGGGTGWGG-----  
M59: -----CCCRGGCCC-----  
M60: -----GGGGAGGCGGGG-----  
M61: -----GGGGKGTGGGGGGGGG-----  
M62: -----GGGCMGGAGG-----  
M63: -----CCCAGCCMGGCCC-----  
M64: -----CCGGAAGTG-----  
M65: -----AGGMAAGG-----

M66: -----GSAGAAAG-----  
 M67: -----AGGCAGAG-----  
 M68: -----CCRGAAG-----  
 M69: -----GGGGAGG-----  
 M70: -----GGAGGCTG-----  
 M71: -----CAGAGCTG-----  
 M72: -----CTGCAGG-----  
 M73: -----GAGCAGAG-----  
 M74: -----AGGCTGG-----  
 M75: -----CTGGGCTG-----  
 M76: -----CAGGGCAG-----  
 M77: -----GAGCTGGG-----  
 M78: -----CCAGAGC-----  
 M79: -----GAGAAAGC-----  
 M80: -----GGGCTGCT-----  
 M81: -----GAGCCAG-----  
 M82: -----CCCCAGAG-----  
 M83: -----CAGGAGC-----  
 M84: -----GAGAGGGG-----  
 M85: -----TGCAGGGR-----  
 M86: -----AGGGGGCG-----

**Familial Profile:**  
[\(click for matrix\)](#)



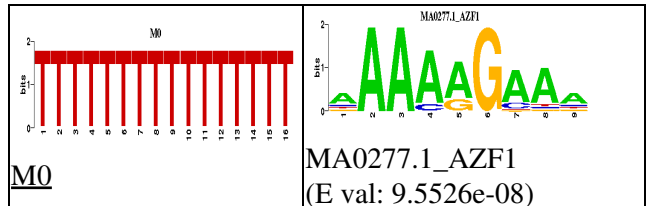
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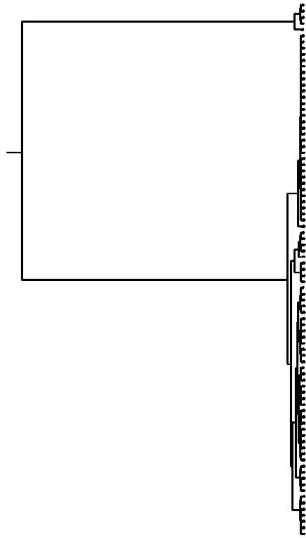
Tree (drawn by [Phylip](#))

[Click here for Newick-format tree](#) (viewable with [MEGA](#))

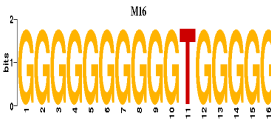
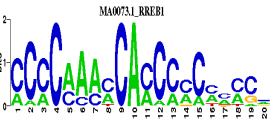
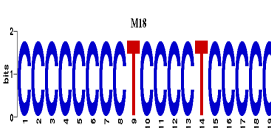
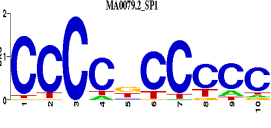
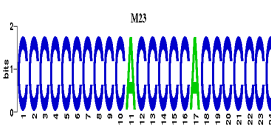
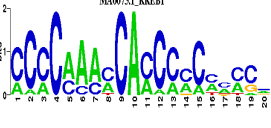
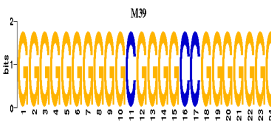
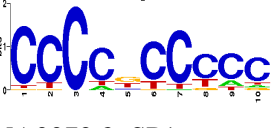
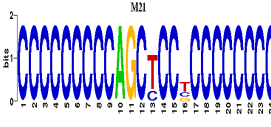
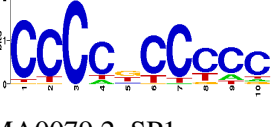
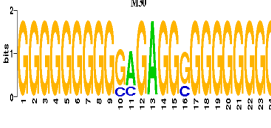
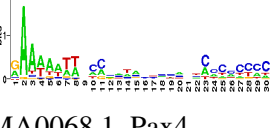
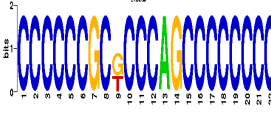
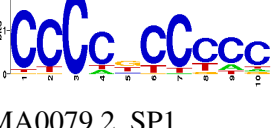
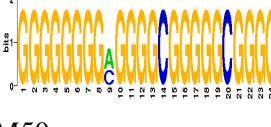
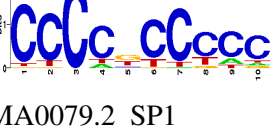
Input Motif

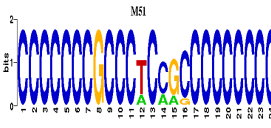
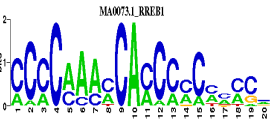
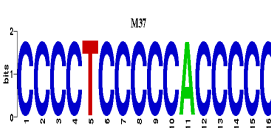
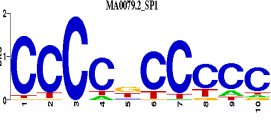
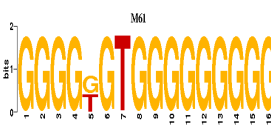
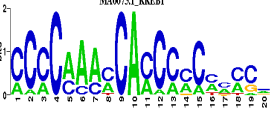
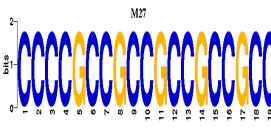
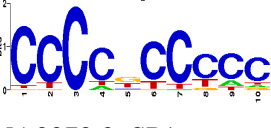
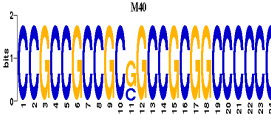

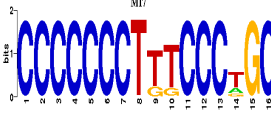


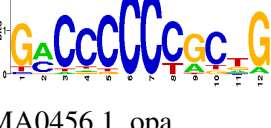


Best match in  
**JASPAR**


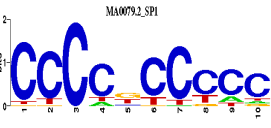

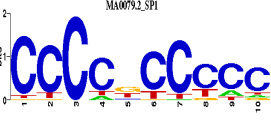

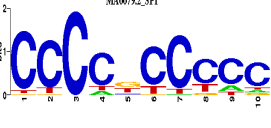
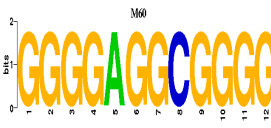
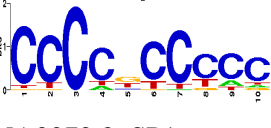
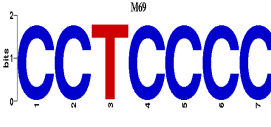
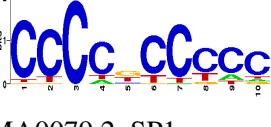

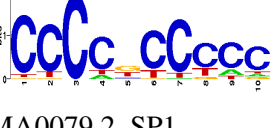

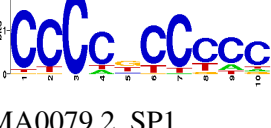

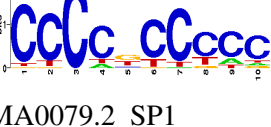





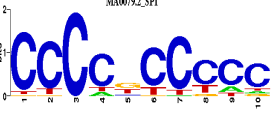


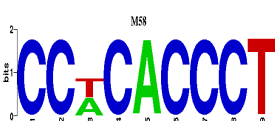


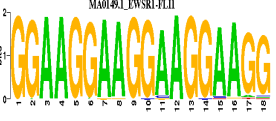

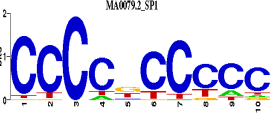



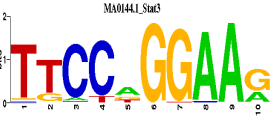


|                   |  |
|-------------------|--|
| <p><b>M2</b></p>  | <p>MA0277.1_AZF1<br/>(E val: 2.1388e-08)</p>   |
| <p><b>M3</b></p>  | <p>MA0120.1_id1<br/>(E val: 4.8404e-12)</p>    |
| <p><b>M4</b></p>  | <p>MA0277.1_AZF1<br/>(E val: 2.6832e-07)</p>   |
| <p><b>M1</b></p>  | <p>MA0151.1_ARID3A<br/>(E val: 2.1236e-04)</p> |
| <p><b>M5</b></p>  | <p>MA0068.1_Pax4<br/>(E val: 6.2811e-12)</p>   |
| <p><b>M8</b></p>  | <p>MA0073.1_RREB1<br/>(E val: 3.8005e-11)</p>  |
| <p><b>M10</b></p> | <p>MA0079.2_SP1<br/>(E val: 1.6058e-12)</p>    |
| <p><b>M12</b></p> | <p>MA0073.1_RREB1<br/>(E val: 3.8005e-11)</p>  |
|                   |  |


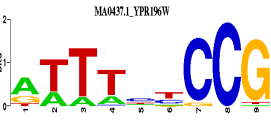

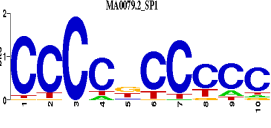
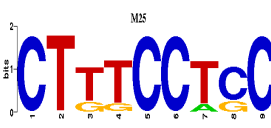




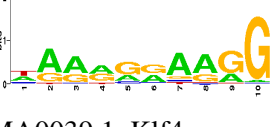

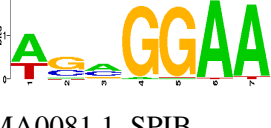



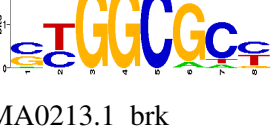
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|--|---|
|  <p><b>M16</b></p>   |  <p><b>MA0073.1_RREB1</b><br/>(E val: 2.6336e-12)</p>  |
|  <p><b>M18</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 2.2236e-12)</p>    |
|  <p><b>M23</b></p>   |  <p><b>MA0073.1_RREB1</b><br/>(E val: 3.1086e-15)</p>  |
|  <p><b>M39</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 1.6058e-12)</p>    |
|  <p><b>M21</b></p>  |  <p><b>MA0079.2_SP1</b><br/>(E val: 3.5643e-09)</p>   |
|  <p><b>M30</b></p> |  <p><b>MA0068.1_Pax4</b><br/>(E val: 2.1715e-10)</p> |
|  <p><b>M32</b></p> |  <p><b>MA0079.2_SP1</b><br/>(E val: 4.5735e-08)</p>  |
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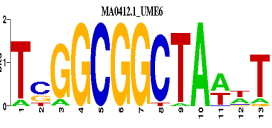




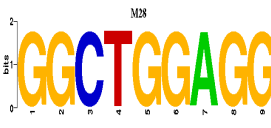

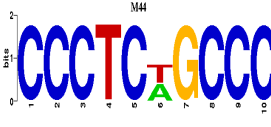
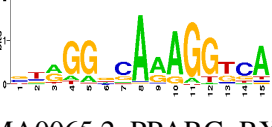
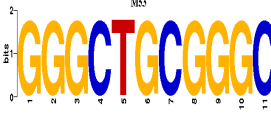




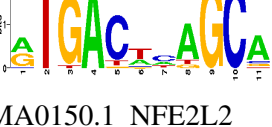
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|--|--|
|  <p><b>M51</b></p>   |  <p><b>MA0073.1_RREB1</b><br/>(E val: 4.2154e-08)</p>   |
|  <p><b>M37</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 1.0928e-12)</p>     |
|  <p><b>M61</b></p>   |  <p><b>MA0073.1_RREB1</b><br/>(E val: 4.4299e-12)</p>   |
|  <p><b>M27</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 2.1604e-08)</p>     |
|  <p><b>M40</b></p>  |  <p><b>MA0320.1_IME1</b><br/>(E val: 6.3740e-05)</p>   |
|  <p><b>M17</b></p> |  <p><b>MA0366.1_RGM1</b><br/>(E val: 3.6566e-05)</p>  |
|  <p><b>M57</b></p> |  <p><b>MA0456.1_opa</b><br/>(E val: 4.6801e-09)</p>   |
|  <p><b>M86</b></p> |  <p><b>MA0155.1_INSM1</b><br/>(E val: 1.1786e-09)</p> |
|  |  |





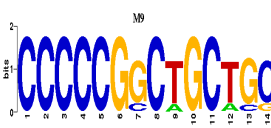
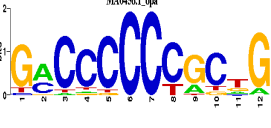
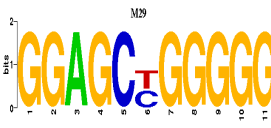

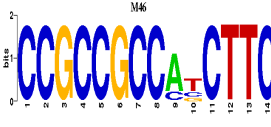


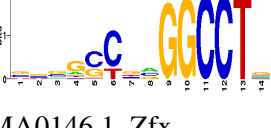

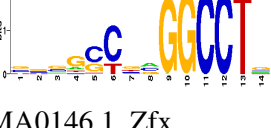

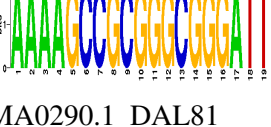
|   |   |
|---|---|
| <p>M11</p>    | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 1.8701e-08)</p>   |
| <p>M22</p>    | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 2.4192e-10)</p>   |
| <p>M26</p>    | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 1.8152e-09)</p>   |
| <p>M60</p>    | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 5.7224e-11)</p>   |
| <p>M69</p>   | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 7.9489e-08)</p>  |
| <p>M35</p>  | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 2.7288e-07)</p> |
| <p>M14</p>  | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 7.7889e-06)</p> |
| <p>M20</p>  | <p>MA0079.2_SP1</p>  <p>MA0079.2_SP1<br/>(E val: 1.1703e-10)</p> |
|   |   |

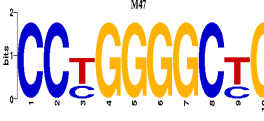
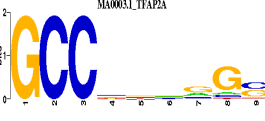
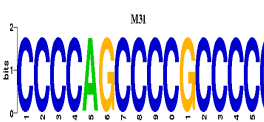
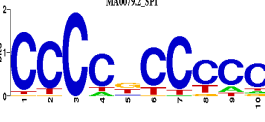
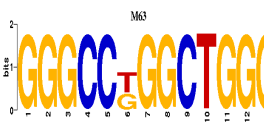


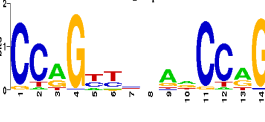


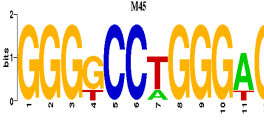

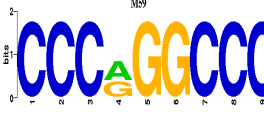
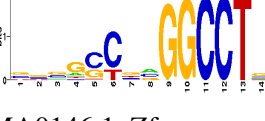


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|  <p><b>M84</b></p>   |  <p><b>MA0366.1_RGM1</b><br/>(E val: 1.7889e-06)</p>        |
|  <p><b>M52</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 4.0231e-08)</p>         |
|  <p><b>M36</b></p>   |  <p><b>MA0366.1_RGM1</b><br/>(E val: 3.9735e-06)</p>        |
|  <p><b>M58</b></p>   |  <p><b>MA0039.2_Klf4</b><br/>(E val: 2.0007e-06)</p>        |
|  <p><b>M6</b></p>   |  <p><b>MA0149.1_EWSR1-FLI1</b><br/>(E val: 1.6366e-11)</p> |
|  <p><b>M62</b></p> |  <p><b>MA0079.2_SP1</b><br/>(E val: 6.6211e-05)</p>       |
|  <p><b>M64</b></p> |  <p><b>MA0062.2_GABPA</b><br/>(E val: 1.9096e-14)</p>     |
|  <p><b>M68</b></p> |  <p><b>MA0144.1_Stat3</b><br/>(E val: 1.0876e-11)</p>     |
|  |  |


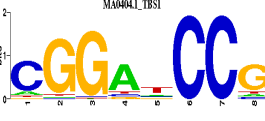

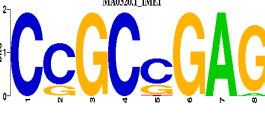









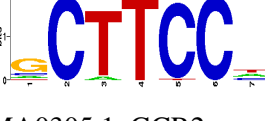
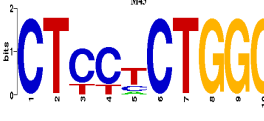
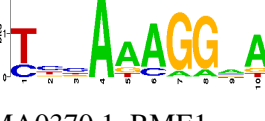



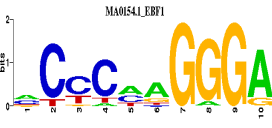

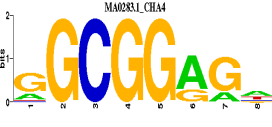








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|  <p><b>M66</b></p>   |  <p><b>MA0437.1_YPR196W</b><br/>(E val: 3.9207e-07)</p> |
|  <p><b>M13</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 6.4883e-05)</p>     |
|  <p><b>M25</b></p>   |  <p><b>MA0090.1_TEAD1</b><br/>(E val: 1.3615e-07)</p>   |
|  <p><b>M41</b></p>   |  <p><b>MA0381.1_SKN7</b><br/>(E val: 2.6301e-04)</p>    |
|  <p><b>M65</b></p>  |  <p><b>MA0039.1_Klf4</b><br/>(E val: 2.8718e-06)</p>   |
|  <p><b>M7</b></p>  |  <p><b>MA0081.1_SPIB</b><br/>(E val: 1.3371e-06)</p>  |
|  <p><b>M42</b></p> |  <p><b>MA0340.1_MOT3</b><br/>(E val: 7.0835e-05)</p>  |
|  <p><b>M81</b></p> |  <p><b>MA0213.1_brk</b><br/>(E val: 9.8307e-05)</p>   |
|  |  |

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|---|---|
| <p>M70</p>    | <p>MA0412.1_UME6<br/>(E val: 4.2425e-04)</p>         |
| <p>M74</p>    | <p>MA0267.1_ACE2<br/>(E val: 5.4064e-05)</p>         |
| <p>M19</p>    | <p>MA0055.1_Myf<br/>(E val: 1.6358e-03)</p>          |
| <p>M28</p>    | <p>MA0410.1_UGA3<br/>(E val: 1.0711e-04)</p>         |
| <p>M44</p>   | <p>MA0065.2_PPARG_RXRA<br/>(E val: 2.0860e-07)</p>  |
| <p>M53</p>  | <p>MA0290.1_DAL81<br/>(E val: 1.1378e-05)</p>      |
| <p>M80</p>  | <p>MA0412.1_UME6<br/>(E val: 1.0019e-03)</p>       |
| <p>M24</p>  | <p>MA0150.1_NFE2L2<br/>(E val: 1.3714e-03)</p>     |
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|  <p><b>M72</b></p>   |  <p><b>MA0385.1_SOK2</b><br/>(E val: 1.4091e-04)</p>    |
|  <p><b>M85</b></p>   |  <p><b>MA0364.1_REI1</b><br/>(E val: 3.7106e-06)</p>    |
|  <p><b>M9</b></p>    |  <p><b>MA0456.1_opa</b><br/>(E val: 1.4648e-07)</p>     |
|  <p><b>M29</b></p>   |  <p><b>MA0344.1_NHP10</b><br/>(E val: 6.9238e-07)</p>   |
|  <p><b>M46</b></p>  |  <p><b>MA0373.1_RPN4</b><br/>(E val: 1.8809e-05)</p>   |
|  <p><b>M33</b></p> |  <p><b>MA0146.1_Zfx</b><br/>(E val: 6.5678e-07)</p>   |
|  <p><b>M55</b></p> |  <p><b>MA0146.1_Zfx</b><br/>(E val: 1.9690e-07)</p>   |
|  <p><b>M38</b></p> |  <p><b>MA0290.1_DAL81</b><br/>(E val: 2.3626e-05)</p> |
|  |  |

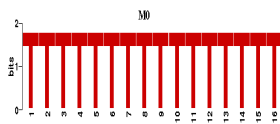
|  |   |
|--|---|
|  <p><b>M47</b></p>   |  <p><b>MA0003.1_TFAP2A</b><br/>(E val: 6.9444e-07)</p>   |
|  <p><b>M31</b></p>   |  <p><b>MA0079.2_SP1</b><br/>(E val: 1.4500e-13)</p>      |
|  <p><b>M63</b></p>   |  <p><b>MA0039.2_Klf4</b><br/>(E val: 4.5199e-06)</p>     |
|  <p><b>M77</b></p>   |  <p><b>MA0145.1_Tcfcp211</b><br/>(E val: 1.1433e-04)</p> |
|  <p><b>M34</b></p>  |  <p><b>MA0163.1_PLAG1</b><br/>(E val: 2.0757e-06)</p>   |
|  <p><b>M45</b></p> |  <p><b>MA0344.1_NHP10</b><br/>(E val: 4.7012e-06)</p>  |
|  <p><b>M59</b></p> |  <p><b>MA0146.1_Zfx</b><br/>(E val: 4.8013e-05)</p>    |
|  <p><b>M56</b></p> |  <p><b>MA0162.1_Egr1</b><br/>(E val: 2.9645e-04)</p>   |
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|  <p><b>M49</b></p>   |  <p><b>MA0404.1_TBS1</b><br/>(E val: 1.0169e-04)</p>   |
|  <p><b>M75</b></p>   |  <p><b>MA0320.1_IME1</b><br/>(E val: 2.7998e-04)</p>   |
|  <p><b>M15</b></p>   |  <p><b>MA0055.1_Myf</b><br/>(E val: 2.6469e-09)</p>    |
|  <p><b>M48</b></p>   |  <p><b>MA0055.1_Myf</b><br/>(E val: 3.5883e-05)</p>    |
|  <p><b>M54</b></p>  |  <p><b>MA0283.1_CHA4</b><br/>(E val: 1.0413e-04)</p>  |
|  <p><b>M83</b></p> |  <p><b>MA0454.1_odd</b><br/>(E val: 2.8017e-05)</p>  |
|  <p><b>M79</b></p> |  <p><b>MA0305.1_GCR2</b><br/>(E val: 1.7357e-04)</p> |
|  <p><b>M43</b></p> |  <p><b>MA0370.1_RME1</b><br/>(E val: 3.4342e-05)</p> |
|  |   |

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|  <p><b>M82</b></p>   |  <p>MA0154.1_EBF1<br/>(E val: 1.2940e-05)</p>   |
|  <p><b>M67</b></p>   |  <p>MA0283.1_CHA4<br/>(E val: 3.2748e-05)</p>   |
|  <p><b>M73</b></p>   |  <p>MA0326.1_MAC1<br/>(E val: 7.3978e-05)</p>   |
|  <p><b>M71</b></p>   |  <p>MA0048.1_NHLH1<br/>(E val: 2.1002e-03)</p>  |
|  <p><b>M78</b></p>  |  <p>MA0451.1_kni<br/>(E val: 4.4000e-05)</p>   |
|  <p><b>M76</b></p> |  <p>MA0364.1_REI1<br/>(E val: 1.6870e-04)</p> |

### Motif Similarity Matches

**M0**



*forward*



*reverse compliment*

*Name*


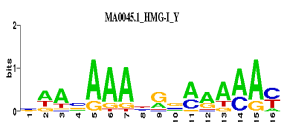




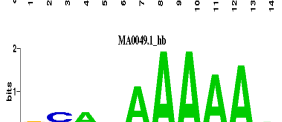
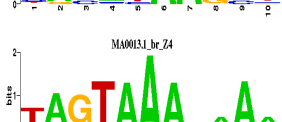


*E value*

*Alignment*

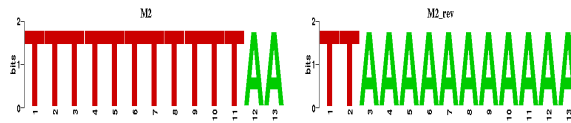
*Motif*

Stamp Results

04/30/14

|                   |            |   |   |
|-------------------|------------|---|---|
| MA0277.1_AZF1     | 9.5526e-08 | TTTTTTTTTTTTTTTT<br>TTTCTTTTT-----                    |    |
| MA0045.1_HMG-I_Y  | 6.4558e-06 | -TTTTTTTTTTTTTTTT<br>RTTTYKNYNTTNTNN-                 |    |
| MA0010.1_br_Z1    | 3.2867e-04 | -AAAAAAAAAAAAAAAA<br>TNATARACAARWN----                |    |
| MA0041.1_Foxd3    | 3.3199e-04 | TTTTTTTTTTTTTTTT<br>AWGTTTTNTTT-----                  |    |
| MA0120.1_id1      | 4.4765e-04 | -AAAAAAAAAAAAAAAA<br>CGNNANRRMNA-----                 |    |
| MA0082.1_squamosa | 7.0105e-04 | -AAAAAAAAAAAAAAAA<br>CAWAWATRGNAAN----                |    |
| MA0049.1_hb       | 1.3259e-03 | -TTTTTTTTTTTTTTTT<br>NTTTTTNYKS-----                  |   |
| MA0013.1_br_Z4    | 7.8795e-03 | TTTTTTTTTTTTTTTT<br>WTWNTTACTA-----                   |  |
| MA0068.1_Pax4     | 8.8669e-03 | -----TTTTTTTTTTTTTT<br>GKRNNNNKNNNNNNNNNNKNNWWWTWTTY- |  |
| MA0040.1_Foxq1    | 1.2400e-02 | AAAAAAAAAAAAAAAA<br>WATAACAATN-----                   |  |

M2



*forward*











*reverse complement*

*Name*

*E value*

*Alignment*

*Motif*

|                   |            |                                     |   |
|-------------------|------------|-------------------------------------|---|
| MA0277.1_AZF1     | 2.1388e-08 | TTTTTTTTTTTAA<br>TTTCTTTTT----      |    |
| MA0010.1_br_Z1    | 1.5214e-07 | -TTTTTTTTTTTAA<br>NWYTTGTYTATNAN    |    |
| MA0013.1_br_Z4    | 3.8459e-05 | TTTTTTTTTTTAA<br>-WTWNTTACTA-       |    |
| MA0041.1_Foxd3    | 8.1237e-05 | -TTTTTTTTTTTAA<br>NAWTGTTTNTTT--    |    |
| MA0082.1_squamosa | 8.6297e-05 | TTAAAAAAAAAAAA-<br>MCAWAWATRGNAA    |    |
| MA0120.1_id1      | 1.1339e-04 | TTAAAAAAAAAAAA-<br>-CGNNANNRRMNA    |    |
| MA0049.1_hb       | 5.0421e-04 | -TTTTTTTTTTTAA<br>NTTTTTNYKS----    |   |
| MA0151.1_ARID3A   | 6.0073e-04 | TTTTTTTTTTTAA-<br>-----TTTAAT       |  |
| MA0045.1_HMG-I_Y  | 8.1448e-04 | -TTTTTTTTTTTAA--<br>RTTYKKNYNTTNTNN |  |
| MA0216.1_cad      | 1.1730e-03 | TTAAAAAAAAAAAA-<br>-YAATAA-----     |  |

M3



*forward*

*reverse complement*

*Name*

*E value*








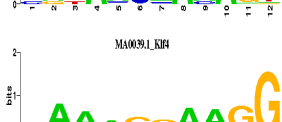
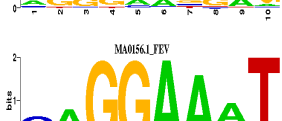

*Alignment*

*Motif*

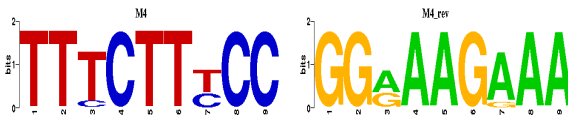


Stamp Results

04/30/14

|                  |            |                                     |   |
|------------------|------------|-------------------------------------|---|
| MA0120.1_id1     | 4.8404e-12 | -GAAAAGGAAAA<br>CGNNANNRRMNA        |    |
| MA0277.1_AZF1    | 4.6613e-10 | TTTTCCTTTTC<br>-TTTCTTTTT-          |    |
| MA0137.1_STAT1   | 4.1049e-08 | --TTTTCCTTTTC-<br>NAGTTTCNNTTTCY    |    |
| MA0045.1_HMG-I_Y | 4.5908e-07 | --TTTTCCTTTTC---<br>RITTYKNYNTTNTNN |    |
| MA0152.1_NFATC2  | 3.1695e-06 | GAAAAGGAAAA<br>----TGGAAAA          |    |
| MA0370.1_RME1    | 4.8994e-06 | TTTTCCTTTTC-<br>--TNCCTTTNNA        |    |
| MA0050.1_IRF1    | 1.5243e-05 | GAAAAGGAAAA-<br>NAAANYGAAACC        |   |
| MA0039.1_Klf4    | 3.6327e-05 | GAAAAGGAAAA<br>-NAARRRAAGG          |  |
| MA0156.1_FEV     | 8.0610e-05 | TTTTCCTTTTC<br>AYTTCCTG---          |  |
| MA0081.1_SPIB    | 1.3999e-04 | TTTTCCTTTTC<br>--TTCKST--           |  |

M4



*forward*


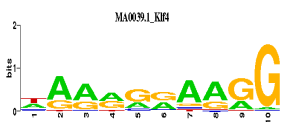
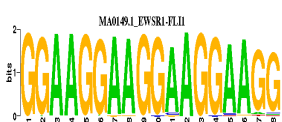






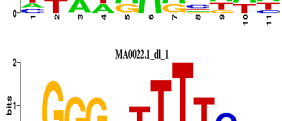
*reverse compliment*

*Name*

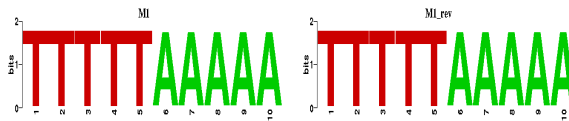
*E value*

*Alignment*

*Motif*

|                     |            |  |   |
|---------------------|------------|--|---|
| MA0277.1_AZF1       | 2.6832e-07 | GGRAAGAAA<br>AAAAAGAAA                 |    |
| MA0039.1_Klf4       | 8.6123e-05 | GGRAAGAAA--<br>-NAARRRAAGG             |    |
| MA0149.1_EWSR1-FLI1 | 1.9457e-04 | -----TTTCTTYCC<br>CCTTCCTTCCTTCCTTC    |    |
| MA0370.1_RME1       | 4.9666e-04 | -GGRAAGAAA<br>TNNAAAGGNA               |    |
| MA0120.1_id1        | 5.9656e-04 | -GGRAAGAAA--<br>CGNNANNRRMNA           |    |
| MA0294.1_EDS1       | 1.0823e-03 | TTTCTTYCC-<br>-NTTNTTCN                |    |
| MA0152.1_NFATC2     | 1.2691e-03 | -GGRAAGAAA<br>TGAAAA---                |   |
| MA0140.1_Tal1_Gata1 | 1.5476e-03 | -----GGRAAGAAA--<br>NNGNNNNNNNNAGATAAN |  |
| MA0013.1_br_Z4      | 1.6421e-03 | TTTCTTYCC--<br>WTWNTTACTA              |  |
| MA0022.1_dl_1       | 1.8845e-03 | ---TTTCTTYCC<br>SGGGTTTTTCN            |  |

**M1**



*forward*


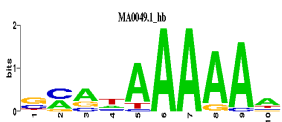


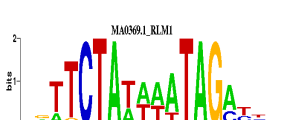





*reverse compliment*

*Name*

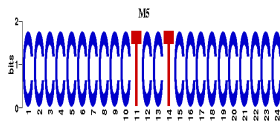
*E value*

*Alignment*

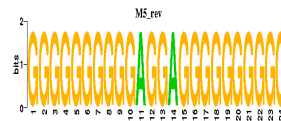
*Motif*

|                  |            |   |   |
|------------------|------------|---|---|
| MA0151.1_ARID3A  | 2.1236e-04 | TTTTTAAAAA<br>--TTTAAT--                  |    |
| MA0049.1_hb      | 3.6750e-04 | -TTTTTAAAAA<br>NTTTTTNYKS-                |    |
| MA0387.1_SPT2    | 2.5650e-03 | -TTTTTAAAAA<br>TTMNTTAANT-                |    |
| MA0218.1_ct      | 2.8959e-03 | TTTTTAAAAA<br>-GTTYAA---                  |    |
| MA0369.1_RLM1    | 3.2108e-03 | -----TTTTTAAAAA-<br>NNRtCTATWWATAGAANN    |    |
| MA0297.1_FKH2    | 3.4116e-03 | TTTTTAAAAA<br>TGTTTAC---                  |    |
| MA0157.1_FOXO3   | 4.1935e-03 | TTTTTAAAAA<br>TGTTTACA--                  |   |
| MA0173.1_CG11617 | 5.0433e-03 | TTTTTAAAAA<br>ATGTWAA---                  |  |
| MA0346.1_NHP6B   | 6.0736e-03 | -----TTTTTAAAAA--<br>NNNYNNWWTATAWNNNNANN |  |
| MA0052.1_MEF2A   | 6.6508e-03 | TTTTTAAAAA---<br>---CTATAAATAG            |  |

**M5**



*forward*



*reverse compliment*

*Name*

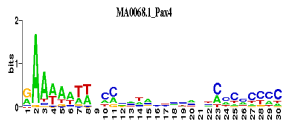
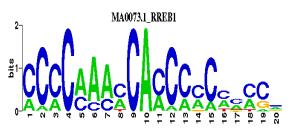
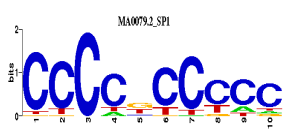

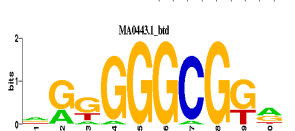


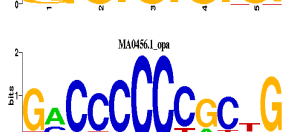
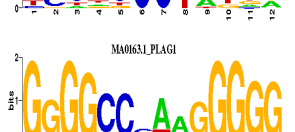

*E value*

*Alignment*

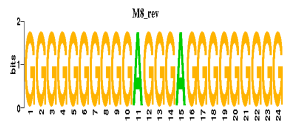
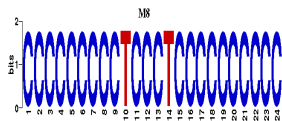
*Motif*

Stamp Results

04/30/14

|                     |            |   |   |
|---------------------|------------|---|---|
| MA0068.1_Pax4       | 6.2811e-12 | GGGGGGGGGAGGAGGGGGGGGGG-----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTWTTY |    |
| MA0073.1_RREB1      | 1.4953e-10 | GGGGGGGGGAGGAGGGGGGGGGG<br>NGKKKGKGGGTGKTTTGGGG----             |    |
| MA0079.2_SP1        | 1.4226e-08 | CCCCCCCCCTCCTCCCCCCCCC<br>CCCNCCCC-----                         |    |
| MA0149.1_EWSR1-FLI1 | 7.7235e-06 | CCCCCCCCCTCCTCCCCCCCCC<br>---CCTTCCTTCCTTCCTTCC---              |    |
| MA0443.1_btd        | 6.6132e-05 | CCCCCCCCCTCCTCCCCCCCCC<br>-----YCCGCCMCN-----                   |    |
| MA0366.1_RGM1       | 9.1437e-05 | CCCCCCCCCTCCTCCCCCCCCC<br>-----CCCT-----                        |    |
| MA0342.1_MSN4       | 9.5799e-05 | GGGGGGGGGAGGAGGGGGGGGGG<br>-----AGGG-----                       |   |
| MA0456.1_opa        | 1.4927e-04 | GGGGGGGGGAGGAGGGGGGGGGG<br>-----CNGCGGGGGK                      |  |
| MA0163.1_PLAG1      | 1.8929e-04 | GGGGGGGGGAGGAGGGGGGGGGG<br>----GGGGCCNAAGGGG-----               |  |
| MA0341.1_MSN2       | 2.2379e-04 | GGGGGGGGGAGGAGGGGGGGGGG<br>-----AGGG-----                       |  |

M8



*forward*

*reverse complement*

*Name*

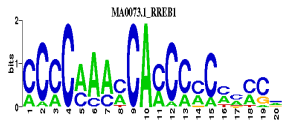
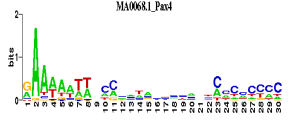
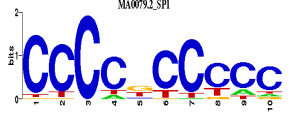
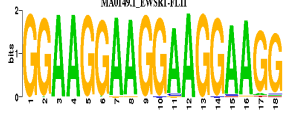



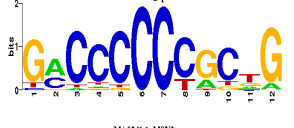


*E value*

*Alignment*

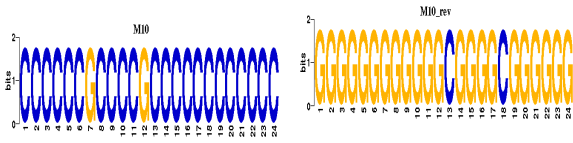
*Motif*

Stamp Results

04/30/14

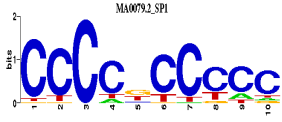
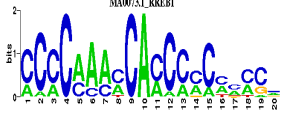
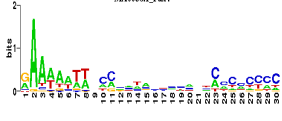







|                     |            |   |   |
|---------------------|------------|---|---|
| MA0073.1_RREB1      | 3.8005e-11 | GGGGGGGGGAGGGAGGGGGGGGG<br>NGKKKGKGGGTGKTTTGGGG----               |    |
| MA0068.1_Pax4       | 1.2075e-09 | GGGGGGGGGAGGGAGGGGGGGGG-----<br>--GKRNNNNKNNNNNNNNNNNNKNNWWWTWTTY |    |
| MA0079.2_SP1        | 1.4226e-08 | CCCCCCCCCTCCCTCCCCCCCCC<br>-----CCCCNCCCC                         |    |
| MA0149.1_EWSR1-FLI1 | 6.1658e-06 | CCCCCCCCCTCCCTCCCCCCCCC<br>-----CCTTCCTTCCTTCCTTC                 |    |
| MA0366.1_RGM1       | 9.1437e-05 | CCCCCCCCCTCCCTCCCCCCCCC<br>----CCCT-----                          |    |
| MA0342.1_MSN4       | 9.5799e-05 | GGGGGGGGGAGGGAGGGGGGGGG<br>-----AGGG-----                         |    |
| MA0443.1_btd        | 1.1076e-04 | CCCCCCCCCTCCCTCCCCCCCCC<br>-----YCCGCCMCN-                        |   |
| MA0456.1_opa        | 1.4927e-04 | GGGGGGGGGAGGGAGGGGGGGGG-<br>-----CNGCGGGGGGKC                     |  |
| MA0341.1_MSN2       | 2.2379e-04 | GGGGGGGGGAGGGAGGGGGGGGG<br>-----AGGG-----                         |  |
| MA0163.1_PLAG1      | 6.7468e-04 | GGGGGGGGGAGGGAGGGGGGGGG<br>-----GGGCCNAAGGGG----                  |  |

M10

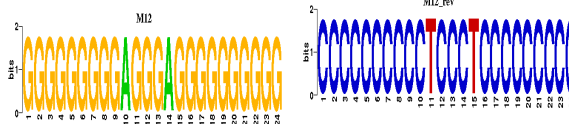


*forward*

*reverse complement*

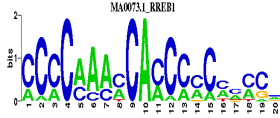
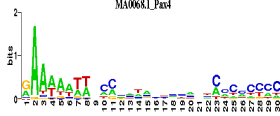
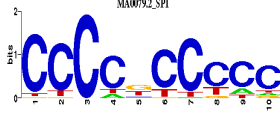



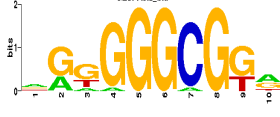
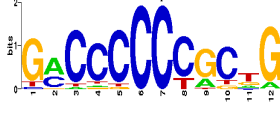


| Name           | E value    | Alignment  | Motif   |
|----------------|------------|--|---|
| MA0079.2_SP1   | 1.6058e-12 | GGGGGGGGGGGGCGGGGCGGGGGG<br>-----GGGGNGGGG-----                  |    |
| MA0073.1_RREB1 | 6.9923e-10 | GGGGGGGGGGGGCGGGGCGGGGGG<br>--NGKKKGKGGGTGKTTTGGGG--             |    |
| MA0068.1_Pax4  | 8.2488e-09 | GGGGGGGGGGGGCGGGGCGGGGGG-----<br>--GKRNNNNKNNNNNNNNNNKNNWWWTWTTY |    |
| MA0039.2_Klf4  | 2.4830e-07 | CCCCCGCCCCGCCCCCCCCCCCC<br>-----GCCMCRCCCN-----                  |    |
| MA0443.1_btd   | 8.2371e-07 | CCCCCGCCCCGCCCCCCCCCCCC<br>-----YCCGCCMCN-----                   |    |
| MA0456.1_opa   | 6.6040e-05 | --CCCCCGCCCCGCCCCCCCCCCCC<br>GMCCCCCGCNG-----                    |   |
| MA0399.1_SUT1  | 1.4445e-04 | CCCCCGCCCCGCCCCCCCCCCCC<br>--CCCCCG-----                         |  |
| MA0338.1_MIG2  | 1.9914e-04 | GGGGGGGGGGGGCGGGGCGGGGGG<br>-----NGYGGGG-----                    |  |
| MA0373.1_RPN4  | 2.4675e-04 | CCCCCGCCCCGCCCCCCCCCCCC<br>-----CGCCACC-----                     |  |
| MA0339.1_MIG3  | 2.6791e-04 | GGGGGGGGGGGGCGGGGCGGGGGG<br>-----NGYGGGG-----                    |  |

M12

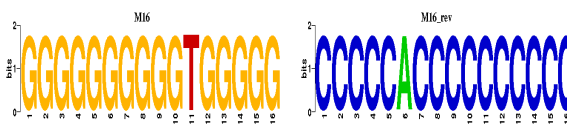


forward

reverse compliment

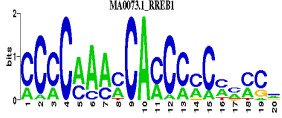
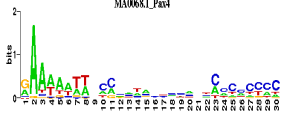
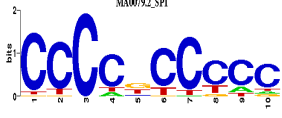
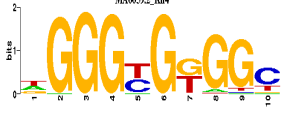




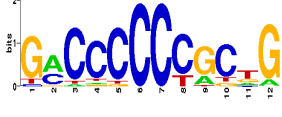
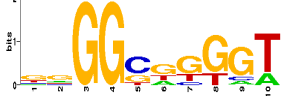
| Name                | E value    | Alignment   | Motif   |
|---------------------|------------|---|---|
| MA0073.1_RREB1      | 3.8005e-11 | -GGGGGGGGGAGGGAGGGGGGGGGG<br>NGKKKGKGGGTGKTTTGGGG-----          |    |
| MA0068.1_Pax4       | 1.2075e-09 | GGGGGGGGGAGGGAGGGGGGGGGG-----<br>-GKRNNNNKNNNNNNNNNNNNKNNWWWTTT |    |
| MA0079.2_SP1        | 1.4226e-08 | CCCCCCCCCTCCCTCCCCCCCCC<br>CCCNCCCC-----                        |    |
| MA0149.1_EWSR1-FLI1 | 7.4014e-06 | CCCCCCCCCTCCCTCCCCCCCCC<br>---CCTTCCTTCCTTCCTTC---              |    |
| MA0366.1_RGM1       | 9.1437e-05 | CCCCCCCCCTCCCTCCCCCCCCC<br>-----CCCCT-----                      |    |
| MA0342.1_MSN4       | 9.5799e-05 | GGGGGGGGGAGGGAGGGGGGGGGG<br>-----AGGGG-----                     |   |
| MA0443.1_btd        | 1.1076e-04 | CCCCCCCCCTCCCTCCCCCCCCC<br>-----YCCGCCMCN                       |  |
| MA0456.1_opa        | 1.4927e-04 | GGGGGGGGGAGGGAGGGGGGGGGG<br>-----CNGCGGGGGK                     |  |
| MA0341.1_MSN2       | 2.2379e-04 | GGGGGGGGGAGGGAGGGGGGGGGG<br>-----AGGGG-----                     |  |
| MA0163.1_PLAG1      | 6.7468e-04 | GGGGGGGGGAGGGAGGGGGGGGGG<br>-----GGGGCCNAAGGGG-----             |  |

**M16**

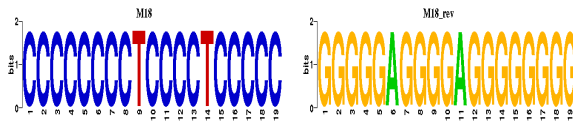


*forward*

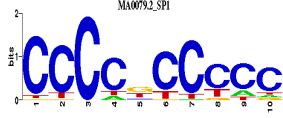
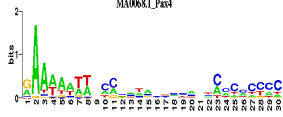
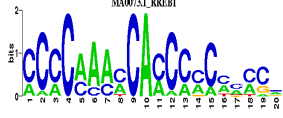




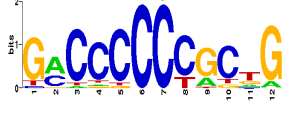

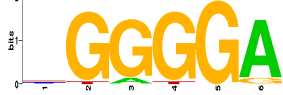
*reverse compliment*

| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                                      | <i>Motif</i>  |
|------------------|----------------|---|---|
| MA0073.1_RREB1   | 2.6336e-12     | ----GGGGGGGGGTGGGG<br>NGKKKGKGGGTGKTTTGGGG            |    |
| MA0068.1_Pax4    | 6.3985e-12     | GGGGGGGGGGTGGGG-----<br>GKRNNNNKNNNNNNNNNNKNNWWWWTTTY |    |
| MA0079.2_SP1     | 1.6629e-09     | CCCCACCCCCCCCC<br>-----CCCNCCCC                       |    |
| MA0039.2_Klf4    | 7.7240e-06     | CCCCACCCCCCCCC<br>GCCMCRCN-----                       |    |
| MA0436.1_YPR022C | 1.9673e-05     | GGGGGGGGGTGGGG<br>-----NGTGGGG-                       |    |
| MA0268.1_ADR1    | 6.3698e-05     | GGGGGGGGGTGGGG<br>-----KTGGGGN                        |   |
| MA0450.1_hkb     | 1.3317e-04     | CCCCACCCCCCCCC<br>---TCACGCCM----                     |  |
| MA0373.1_RPN4    | 1.8146e-04     | GGGGGGGGGTGGGG<br>-----GGTGGCG-                       |  |
| MA0456.1_opa     | 2.2763e-04     | CCCCACCCCCCCCC<br>----GMCCCCCGCNG                     |  |
| MA0079.1_SP1     | 2.3729e-04     | CCCCACCCCCCCCC<br>-----ACCCNGCCNN-                    |  |

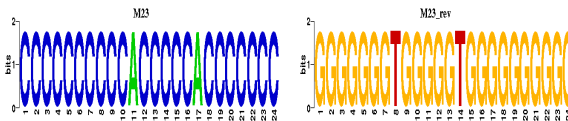
**M18**

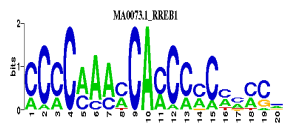
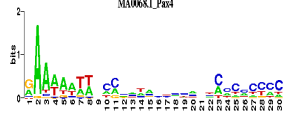
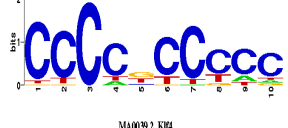


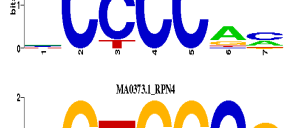
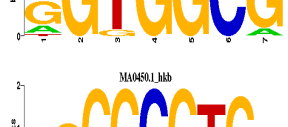

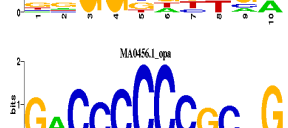





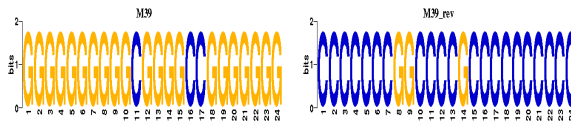
|                     | <i>forward</i> | <i>reverse compliment</i>                                      |   |
|---------------------|----------------|--|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>   | <i>Motif</i>  |
| MA0079.2_SP1        | 2.2236e-12     | GGGGGAGGGGAGGGGGGGG<br>GGGGGNGGGG-----                         |    |
| MA0068.1_Pax4       | 3.2110e-10     | ----GGGGGAGGGGAGGGGGGGG-----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTWTY |    |
| MA0073.1_RREB1      | 1.3754e-07     | GGGGGAGGGGAGGGGGGGG-<br>NGKKKGKGGGTGKTTTGGGG                   |    |
| MA0366.1_RGM1       | 5.2311e-05     | CCCCCCCCCTCCCCTCCCCC<br>----CCCCT-----                         |    |
| MA0342.1_MSN4       | 5.4844e-05     | GGGGGAGGGGAGGGGGGGG<br>----AGGGG-----                          |    |
| MA0149.1_EWSR1-FLI1 | 7.0046e-05     | CCCCCCCCCTCCCCTCCCCC-<br>--CCTTCCTTCCTTCCTTCC                  |   |
| MA0341.1_MSN2       | 1.2992e-04     | GGGGGAGGGGAGGGGGGGG<br>----AGGGG-----                          |  |
| MA0456.1_opa        | 2.3448e-04     | --CCCCCCCCCTCCCCTCCCCC<br>GMCCCCCGCNG-----                     |  |
| MA0443.1_btd        | 3.7131e-04     | -GGGGGAGGGGAGGGGGGGG<br>NGKGGGCGGR-----                        |  |
| MA0056.1_MZF1_1-4   | 5.9580e-04     | CCCCCCCCCTCCCCTCCCCC<br>-----TCCCN-----                        |  |

**M23**



|                  | <i>forward</i> | <i>reverse compliment</i>  |   |
|------------------|----------------|--|---|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>   | <i>Motif</i>  |
| MA0073.1_RREB1   | 3.1086e-15     | GGGGGGGTGGGGGTGGGGGGGGGG<br>---NGKKKGKGGGTGKTTTGGGG-                 |    |
| MA0068.1_Pax4    | 3.1063e-12     | GGGGGGGTGGGGGTGGGGGGGGGG-----<br>---GKRNNNNKNNNNNNNNNNNNKNNWWWTWT TY |    |
| MA0079.2_SP1     | 1.4226e-08     | CCCCCCCCCACCACCACCACC<br>CCCNCCCC-----                               |    |
| MA0039.2_Klf4    | 4.4242e-05     | CCCCCCCCCACCACCACCACC<br>----GCCMCRCCN-----                          |    |
| MA0436.1_YPR022C | 6.3182e-05     | GGGGGGGTGGGGGTGGGGGGGGGG<br>----NGTGGGG-----                         |   |
| MA0268.1_ADR1    | 1.9774e-04     | GGGGGGGTGGGGGTGGGGGGGGGG<br>-----KTGGGGN-----                        |  |
| MA0373.1_RPN4    | 5.4283e-04     | GGGGGGGTGGGGGTGGGGGGGGGG<br>----GGTGGCG-----                         |  |
| MA0450.1_hkb     | 5.5168e-04     | CCCCCCCCCACCACCACCACC<br>-----TCACGCCM-                              |  |
| MA0079.1_SP1     | 1.0600e-03     | CCCCCCCCCACCACCACCACC--<br>-----ACCCNGCCNN                           |  |
| MA0456.1_opa     | 1.2723e-03     | GGGGGGGTGGGGGTGGGGGGGGGG<br>-----CNGCGGGGGKC--                       |  |

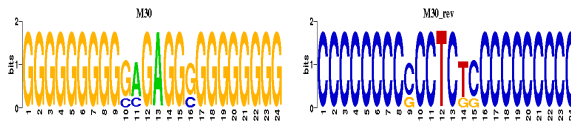
**M39**

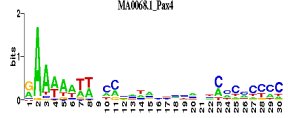
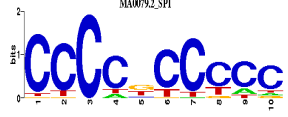
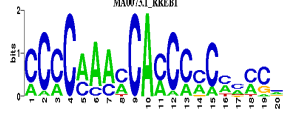

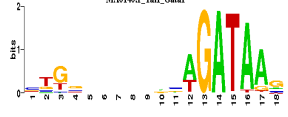
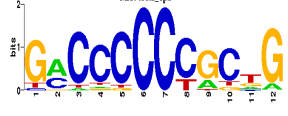



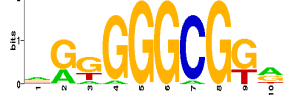




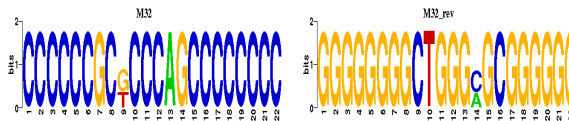
|                   | <i>forward</i> | <i>reverse compliment</i>  |              |
|-------------------|----------------|--|--------------|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>   | <i>Motif</i> |
| MA0079.2_SP1      | 3.5643e-09     | GGGGGGGGNNGGAGCTGGGGGGGGG<br>---GGGGGNGGGG-----                    |              |
| MA0073.1_RREB1    | 4.5352e-08     | GGGGGGGGNNGGAGCTGGGGGGGGG<br>NGKKKGKGGGTGKTTTGGGG----              |              |
| MA0068.1_Pax4     | 5.8308e-07     | --GGGGGGGGNNGGAGCTGGGGGGGGG----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTWTTY |              |
| MA0443.1_btd      | 6.5356e-06     | CCCCCCCCCAGCTCCNCCCCCCCC<br>-----YCCGCCMCN--                       |              |
| MA0456.1_opa      | 2.2389e-04     | GGGGGGGGNNGGAGCTGGGGGGGGG<br>-----CNGCGGGGGGKC--                   |              |
| MA0163.1_PLAG1    | 4.2005e-04     | GGGGGGGGNNGGAGCTGGGGGGGGG<br>-----GGGGCCNAAGGGG---                 |              |
| MA0290.1_DAL81    | 6.5467e-04     | ---CCCCCCCCCAGCTCCNCCCCCCCC<br>AATCCCGCCCGCGGCTTTT-----            |              |
| MA0283.1_CHA4     | 1.2435e-03     | CCCCCCCCCAGCTCCNCCCCCCCC<br>-----NCTCCGCC-----                     |              |
| MA0056.1_MZF1_1-4 | 2.4746e-03     | CCCCCCCCCAGCTCCNCCCCCCCC<br>-----TCCCN---                          |              |
| MA0344.1_NHP10    | 3.3613e-03     | GGGGGGGGNNGGAGCTGGGGGGGGG<br>-----NCCGGGGA-----                    |              |

**M30**

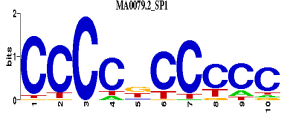
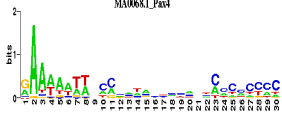
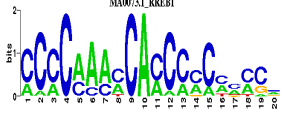




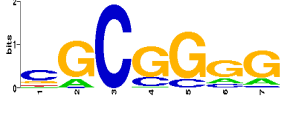




|                     | <i>forward</i> | <i>reverse compliment</i>                                     |   |
|---------------------|----------------|---|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>  | <i>Motif</i>  |
| MA0068.1_Pax4       | 2.1715e-10     | GGGGGGGGGAGAGGGGGGGGGG-----<br>--GKRNNNNKNNNNNNNNNNKNNWWWTWTY |    |
| MA0079.2_SP1        | 1.9235e-08     | CCCCCCCCCTCTCCCCCCCCC<br>-----CCCNCCCCC                       |    |
| MA0073.1_RREB1      | 8.0506e-08     | GGGGGGGGGAGAGGGGGGGGGG<br>NGKKKGKGGGTGKTTTGGG----             |    |
| MA0163.1_PLAG1      | 8.0009e-07     | CCCCCCCCCTCTCCCCCCCCC<br>-----CCCCTTNGGCC----                 |    |
| MA0140.1_Tal1_Gata1 | 4.0194e-05     | CCCCCCCCCTCTCCCCCCCCC--<br>-----NTTATCTNNNNNNNNC              |    |
| MA0456.1_opa        | 1.0471e-04     | GGGGGGGGGAGAGGGGGGGGGG<br>-----CNGCGGGGGK----                 |   |
| MA0366.1_RGM1       | 1.4949e-04     | CCCCCCCCCTCTCCCCCCCCC<br>-----CCCCT-----                      |  |
| MA0342.1_MS4        | 1.5640e-04     | CCCCCCCCCTCTCCCCCCCCC<br>-----CCCCT-----                      |  |
| MA0341.1_MS2        | 3.5600e-04     | GGGGGGGGGAGAGGGGGGGGGG<br>-----AGGG-----                      |  |
| MA0443.1_btd        | 4.1851e-04     | CCCCCCCCCTCTCCCCCCCCC<br>-----YCCGCCMCN-----                  |  |

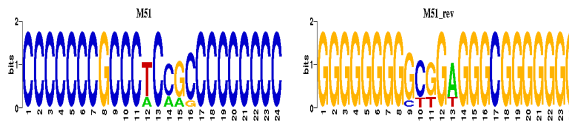
**M32**





|                | <i>forward</i> | <i>reverse compliment</i>                                       |   |
|----------------|----------------|---|---|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>  | <i>Motif</i>  |
| MA0079.2_SP1   | 1.2657e-13     | GGGGGGGMGGGGCGGGGCGGGG<br>---GGGGNGGGG-----                     |    |
| MA0068.1_Pax4  | 2.3153e-07     | GGGGGGGMGGGGCGGGGCGGGG-----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTWT TY |    |
| MA0073.1_RREB1 | 3.6721e-07     | --GGGGGGGMGGGGCGGGGCGGGG<br>NGKKKGKGGGTGKTTTGGGG-----           |    |
| MA0162.1_Egr1  | 4.6223e-07     | CCCCGCCCCGCCCKCCCCCCCC<br>--MCGCCCACGCN-----                    |    |
| MA0443.1_btd   | 8.2371e-07     | CCCCGCCCCGCCCKCCCCCCCC<br>-YCCGCCMCN-----                       |    |
| MA0039.2_Klf4  | 1.2054e-05     | CCCCGCCCCGCCCKCCCCCCCC<br>-----GCCMCRCNN-----                   |   |
| MA0323.1_IXR1  | 1.0164e-04     | CCCCGCCCCGCCCKCCCCCCCC<br>CMCCGCTTCCGGYTT-----                  |  |
| MA0399.1_SUT1  | 1.4445e-04     | CCCCGCCCCGCCCKCCCCCCCC<br>CCCCGCG-----                          |  |
| MA0338.1_MIG2  | 1.9914e-04     | GGGGGGGMGGGGCGGGGCGGGG<br>-----NGYGGGG-----                     |  |
| MA0373.1_RPN4  | 2.4675e-04     | CCCCGCCCCGCCCKCCCCCCCC<br>---CGCCACC-----                       |  |

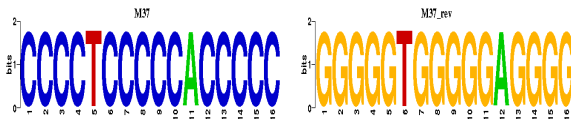
**M51**



*forward*                      *reverse compliment*

| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>  | <i>Motif</i> |
|----------------|----------------|---|--------------|
| MA0073.1_RREB1 | 4.2154e-08     | GGGGGGGGGCGGAGGGCGGGGGG<br>--NGKKKGKGGGTGKTTTGGGG--               |              |
| MA0443.1_btd   | 6.9907e-08     | CCCCCGCCCTCCGCCCCCCCCC<br>-----YCCGCCMCN----                      |              |
| MA0079.2_SP1   | 9.5476e-08     | CCCCCGCCCTCCGCCCCCCCCC<br>---CCCCNCCCC-----                       |              |
| MA0068.1_Pax4  | 6.5427e-06     | -GGGGGGGGGCGGAGGGCGGGGGG-----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTTWTTY |              |
| MA0456.1_opa   | 1.1079e-05     | GGGGGGGGGCGGAGGGCGGGGGG-<br>-----CNGCGGGGGGKC                     |              |
| MA0283.1_CHA4  | 1.4551e-05     | CCCCCGCCCTCCGCCCCCCCCC<br>-----NCTCCGCC-----                      |              |
| MA0039.2_Klf4  | 9.0037e-05     | CCCCCGCCCTCCGCCCCCCCCC<br>--GCCMCRCCN-----                        |              |
| MA0399.1_SUT1  | 1.4445e-04     | CCCCCGCCCTCCGCCCCCCCCC<br>---CCCCGCG-----                         |              |
| MA0338.1_MIG2  | 1.9914e-04     | GGGGGGGGGCGGAGGGCGGGGGG<br>-----NGYGGGG---                        |              |
| MA0339.1_MIG3  | 2.6791e-04     | GGGGGGGGGCGGAGGGCGGGGGG<br>-----NGYGGGG---                        |              |

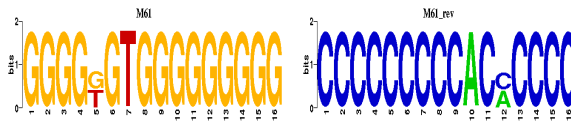
**M37**





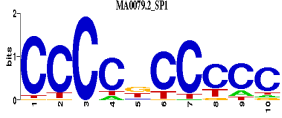




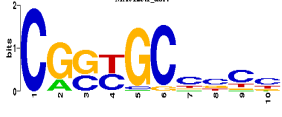
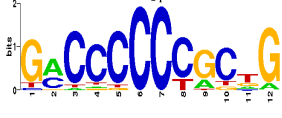


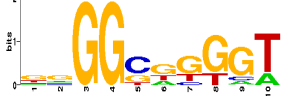
|                  | <i>forward</i> | <i>reverse compliment</i>                                     |              |
|------------------|----------------|---|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>  | <i>Motif</i> |
| MA0079.2_SP1     | 1.0928e-12     | GGGGGTGGGGGAGGGG<br>-----GGGGNGGGG                            |              |
| MA0068.1_Pax4    | 1.1597e-08     | -----GGGGGTGGGGGAGGGG-----<br>GKRNNNNKNNNNNNNNNNNNKNNWWWTWTTY |              |
| MA0073.1_RREB1   | 2.2234e-07     | -----GGGGGTGGGGGAGGGG<br>NGKKKGKGGGTGKTTTGGGG-                |              |
| MA0039.2_Klf4    | 7.7240e-06     | CCCCTCCCCACCCCC<br>-----GCCMCRCNN-                            |              |
| MA0436.1_YPR022C | 1.9673e-05     | GGGGGTGGGGGAGGGG<br>---NGTGGGG-----                           |              |
| MA0366.1_RGM1    | 3.6566e-05     | CCCCTCCCCACCCCC<br>CCCCT-----                                 |              |
| MA0342.1_MSN4    | 3.8326e-05     | GGGGGTGGGGGAGGGG<br>-----AGGGG                                |              |
| MA0268.1_ADR1    | 6.3698e-05     | GGGGGTGGGGGAGGGG<br>----KTGGGN-----                           |              |
| MA0341.1_MSN2    | 9.0391e-05     | GGGGGTGGGGGAGGGG<br>-----AGGGG                                |              |
| MA0373.1_RPN4    | 1.8146e-04     | GGGGGTGGGGGAGGGG<br>---GTTGCC-----                            |              |

**M61**

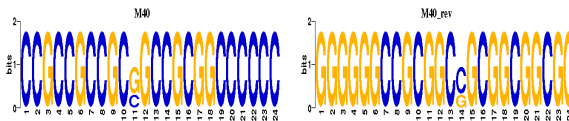




*forward*                      *reverse compliment*

| <i>Name</i>   | <i>E value</i> | <i>Alignment</i>                         | <i>Motif</i>  |
|---------------|----------------|--|---|
| MA0079.2_SP1  | 2.1604e-08     | CCCCGCCGCCGCCGCCGCC<br>CCCCNCCCC-----    |    |
| MA0399.1_SUT1 | 7.4559e-05     | CCCCGCCGCCGCCGCCGCC<br>CCCCGCG-----      |    |
| MA0338.1_MIG2 | 1.0363e-04     | GGCGGCGGCGGCGGCGGG<br>-----NGYGGG        |    |
| MA0339.1_MIG3 | 1.4051e-04     | GGCGGCGGCGGCGGCGGG<br>-----NGYGGG        |    |
| MA0283.1_CHA4 | 2.9525e-04     | -CCCCGCCGCCGCCGCCGCC<br>NCTCCGC-----     |    |
| MA0123.1_abi4 | 3.0657e-04     | GGCGGCGGCGGCGGCGGG<br>NGNNGCRSCG-----    |   |
| MA0456.1_opa  | 3.3151e-04     | GGCGGCGGCGGCGGCGGG-<br>-----CNGCGGGGGK   |  |
| MA0162.1_Egr1 | 3.7317e-04     | CCCCGCCGCCGCCGCCGCC<br>--MCGCCACGCN----- |  |
| MA0373.1_RPN4 | 3.8776e-04     | CCCCGCCGCCGCCGCCGCC<br>---CGCCACC-----   |  |
| MA0079.1_SP1  | 4.6675e-04     | -CCCCGCCGCCGCCGCCGCC<br>ACCCNGCCNN-----  |  |

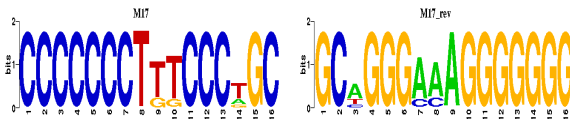
**M40**



*forward*                      *reverse compliment*

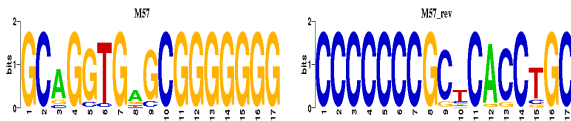
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                                  | <i>Motif</i> |
|------------------|----------------|---|--------------|
| MA0320.1_IME1    | 6.3740e-05     | GGGGGGCCGCGGCCGCGGCGGCGG<br>-----CTCGGCGG----     |              |
| MA0361.1_RDS1    | 9.4095e-05     | GGGGGGCCGCGGCCGCGGCGGCGG<br>-----NCGGCCG-----     |              |
| MA0429.1_YLL054C | 1.1274e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>-----NCGGCCG-----       |              |
| MA0163.1_PLAG1   | 2.5537e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>-----CCCCCTNCGGCC--     |              |
| MA0079.2_SP1     | 3.6634e-04     | GGGGGGCCGCGGCCGCGGCGGCGG<br>--GGGGGNGGGG-----     |              |
| MA0123.1_abi4    | 3.9442e-04     | -GGGGGGCCGCGGCCGCGGCGGCGG<br>NGNNGCRSCG-----      |              |
| MA0394.1_STP1    | 4.1834e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>---NMGCCGCR-----        |              |
| MA0290.1_DAL81   | 4.9906e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>----AATCCCGCCCGCGCTTTT- |              |
| MA0353.1_PDR3    | 6.1785e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>-----TCCGCGGA-----      |              |
| MA0352.1_PDR1    | 6.8089e-04     | CCGCCCGCGGCCGCGGCCCGCC<br>-----TCCGCGGN-----      |              |

**M17**



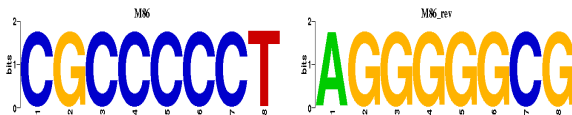
|                  | <i>forward</i> | <i>reverse compliment</i>               |              |
|------------------|----------------|---|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i> |
| MA0366.1_RGM1    | 3.6566e-05     | CCCCCCTTTCCCTGC<br>---CCCCT-----        |              |
| MA0342.1_MSX4    | 3.8326e-05     | GCAGGGAAAGGGGGGG<br>-----AGGGG---       |              |
| MA0341.1_MSX2    | 9.0391e-05     | GCAGGGAAAGGGGGGG<br>-----AGGGG---       |              |
| MA0079.2_SP1     | 1.2603e-04     | CCCCCCTTTCCCTGC<br>---CCCNCCCC---       |              |
| MA0323.1_IXR1    | 3.5503e-04     | CCCCCCTTTCCCTGC--<br>---CMCCGCTTCCGGYTT |              |
| MA0039.1_Klf4    | 5.0905e-04     | GCAGGGAAAGGGGGGG<br>-NAARRRAAG-----     |              |
| MA0163.1_PLA1    | 7.4736e-04     | GCAGGGAAAGGGGGGG<br>-GGGGCCNAAGGGG-     |              |
| MA0423.1_YER130C | 1.1526e-03     | GCAGGGAAAGGGGGGG<br>-----NAWAGGGN--     |              |
| MA0456.1_opa     | 3.4292e-03     | GCAGGGAAAGGGGGGG--<br>-----CNGCGGGGGKC  |              |
| MA0364.1_REI1    | 3.9164e-03     | GCAGGGAAAGGGGGGG<br>-----NCAGGGG---     |              |

**M57**



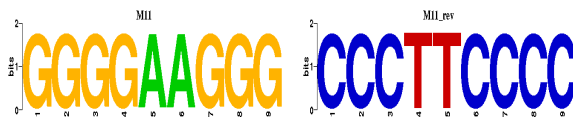
|               | <i>forward</i> | <i>reverse compliment</i>             |              |
|---------------|----------------|---------------------------------------|--------------|
| <i>Name</i>   | <i>E value</i> | <i>Alignment</i>                      | <i>Motif</i> |
| MA0456.1_opa  | 4.6801e-09     | -CCCCCCCCTCACCTGC<br>GMCCCCCGCNG----- |              |
| MA0086.1_sna  | 4.6051e-07     | CCCCCCCCTCACCTGC<br>-----CACCTG-      |              |
| MA0079.2_SP1  | 1.7614e-05     | GCAGGTGAGCGGGGGGG<br>----GGGGNGGGG--- |              |
| MA0399.1_SUT1 | 6.5395e-05     | CCCCCCCCTCACCTGC<br>---CCCCGCG-----   |              |
| MA0322.1_INO4 | 7.0311e-05     | CCCCCCCCTCACCTGC<br>-----TTCACATGC    |              |
| MA0338.1_MIG2 | 7.7383e-05     | GCAGGTGAGCGGGGGGG<br>-----NGYGGGG---  |              |
| MA0321.1_INO2 | 9.0858e-05     | CCCCCCCCTCACCTGC<br>-----TTCACATGC    |              |
| MA0339.1_MIG3 | 1.0049e-04     | GCAGGTGAGCGGGGGGG<br>-----NGYGGGG---  |              |
| MA0409.1_TYE7 | 1.6390e-04     | GCAGGTGAGCGGGGGGG<br>-CACGTGA-----    |              |
| MA0337.1_MIG1 | 2.6887e-04     | GCAGGTGAGCGGGGGGG<br>-----SYGGGGN--   |              |

M86



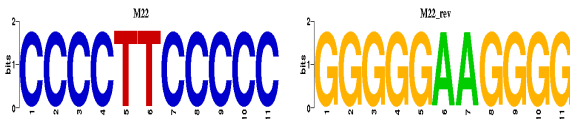
|                    | <i>forward</i> | <i>reverse compliment</i>               |              |
|--------------------|----------------|---|--------------|
| <i>Name</i>        | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i> |
| MA0155.1_INSM1     | 1.1786e-09     | CGCCCCCT----<br>YGCCCCCTGRCA            |              |
| MA0139.1_CTCF      | 3.1024e-08     | ---CGCCCCCT-----<br>NNSYGCCMCCTRSTGGNNR |              |
| MA0443.1_btd       | 4.9632e-08     | --CGCCCCCT<br>YCCGCCCMCN                |              |
| MA0079.2_SP1       | 2.5831e-07     | AGGGGGCG---<br>-GGGGNGGGG               |              |
| MA0373.1_RPN4      | 1.1938e-06     | CGCCCCCT<br>CGCCACC-                    |              |
| MA0366.1_RGM1      | 1.7889e-06     | CGCCCCCT<br>---CCCCT                    |              |
| MA0342.1_MSN4      | 1.8863e-06     | AGGGGGCG<br>AGGGG---                    |              |
| MA0341.1_MSN2      | 4.9834e-06     | AGGGGGCG<br>AGGGG---                    |              |
| MA0450.1_hkb       | 2.2598e-05     | ---CGCCCCCT<br>TCACGCCCM--              |              |
| MA0057.1_MZF1_5-13 | 4.9742e-05     | CGCCCCCT--<br>NTNCCCCTMN                |              |

**M11**



|                     | <i>forward</i> | <i>reverse compliment</i>          |              |
|---------------------|----------------|------------------------------------|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i> |
| MA0079.2_SP1        | 1.8701e-08     | GGGGAAGGG-<br>GGGGGNGGGG           |              |
| MA0056.1_MZF1_1-4   | 4.2872e-05     | CCCTTCCCC-<br>----TCCCCN           |              |
| MA0065.2_PPARG_RXRA | 5.2993e-05     | ---GGGGAAGGG---<br>NNRGGNCAAAGGKCA |              |
| MA0039.1_Klf4       | 6.3995e-05     | CCCTTCCCC--<br>-CCTYYTTN           |              |
| MA0080.1_SPI1       | 9.1317e-05     | CCCTTCCCC<br>--STCCN-              |              |
| MA0305.1_GCR2       | 3.8743e-04     | CCCTTCCCC<br>-GCTCCN-              |              |
| MA0080.2_SPI1       | 4.1676e-04     | CCCTTCCCC<br>-ACTTCCT-             |              |
| MA0105.1_NFKB1      | 5.8413e-04     | GGGGAAGGG--<br>GGGAATCCCC          |              |
| MA0026.1_Eip74EF    | 6.6418e-04     | CCCTTCCCC<br>--YTCCGG              |              |
| MA0304.1_GCR1       | 1.5878e-03     | CCCTTCCCC<br>GGCTTCCA-             |              |

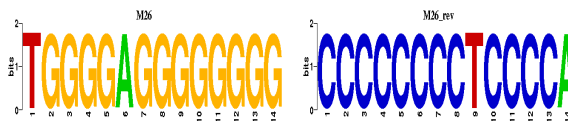
M22





|                     | <i>forward</i> | <i>reverse compliment</i>                             |              |
|---------------------|----------------|---|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                                      | <i>Motif</i> |
| MA0079.2_SP1        | 2.4192e-10     | CCCCTTCCCC<br>CCCCNCCCCC-                             |              |
| MA0366.1_RGM1       | 1.0406e-05     | CCCCTTCCCC<br>CCCCT-----                              |              |
| MA0342.1_MSNA       | 1.0929e-05     | GGGGGAAGGGG<br>-----AGGGG                             |              |
| MA0341.1_MSNA       | 2.6803e-05     | GGGGGAAGGGG<br>-----AGGGG                             |              |
| MA0065.2_PPARG_RXRA | 3.8011e-05     | --GGGGGAAGGGG--<br>NNRGGNCAAAGGKCA                    |              |
| MA0068.1_Pax4       | 6.9262e-05     | -----CCCCTTCCCC--<br>RAAWAWWWNNMNNNNNNNNNNNNMNNNNNYMC |              |
| MA0056.1_MZF1_1-4   | 1.1914e-04     | CCCCTTCCCC<br>-----TCCCCN                             |              |
| MA0163.1_PLAG1      | 2.3997e-04     | -CCCCTTCCCC--<br>CCCCCTTNGGCCCC                       |              |
| MA0080.1_SFI1       | 2.4265e-04     | CCCCTTCCCC<br>---STTCN--                              |              |
| MA0039.1_Klf4       | 4.0315e-04     | CCCCTTCCCC-<br>--CCTTYYYTTN                           |              |

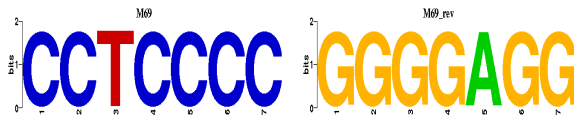
**M26**





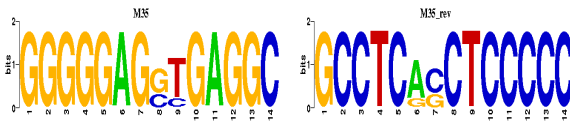
|               | <i>forward</i> | <i>reverse compliment</i>          |              |
|---------------|----------------|------------------------------------|--------------|
| <i>Name</i>   | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i> |
| MA0079.2_SP1  | 5.7224e-11     | GGGGAGGCGGGG<br>--GGGGNGGGG        |              |
| MA0323.1_IXR1 | 4.8536e-06     | ---GGGGAGGCGGGG<br>AARCCGGAAGCGGKG |              |
| MA0399.1_SUT1 | 1.3845e-05     | CCCCGCCTCCCC<br>CCCCGCG-----       |              |
| MA0338.1_MIG2 | 1.9648e-05     | GGGGAGGCGGGG<br>-----NGYGGGG       |              |
| MA0339.1_MIG3 | 2.7176e-05     | GGGGAGGCGGGG<br>-----NGYGGGG       |              |
| MA0443.1_btd  | 3.7881e-05     | CCCCGCCTCCCC<br>-YCCGCCCMCN-       |              |
| MA0283.1_CHA4 | 4.8215e-05     | -CCCCGCCTCCCC<br>NCTCCGCC-----     |              |
| MA0079.1_SP1  | 4.9185e-05     | -CCCCGCCTCCCC<br>ACCCNGCCNN---     |              |
| MA0373.1_RPN4 | 8.0563e-05     | CCCCGCCTCCCC<br>---CGCCACC--       |              |
| MA0337.1_MIG1 | 9.8371e-05     | GGGGAGGCGGGG-<br>-----SYGGGGN      |              |

**M69**



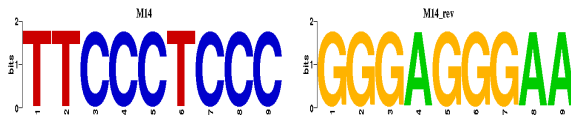
|                      | <i>forward</i> | <i>reverse compliment</i>            |              |
|----------------------|----------------|--------------------------------------|--------------|
| <i>Name</i>          | <i>E value</i> | <i>Alignment</i>                     | <i>Motif</i> |
| MA0079.2_SP1         | 7.9489e-08     | -GGGGAGG--<br>GGGGGNGGGG             |              |
| MA0056.1_MZF1_1-4    | 6.9569e-06     | CCTCCCC-<br>--TCCCN                  |              |
| MA0443.1_btd         | 3.5145e-05     | --GGGGAGG-<br>NGKGGGCGGR             |              |
| MA0344.1_NHP10       | 1.8001e-04     | CCTCCCC---<br>--TCCCCGN              |              |
| MA0159.1_RXR_RAR_DR5 | 4.0204e-04     | ---CCTCCCC-----<br>TGACCTNYNNNTGAMCY |              |
| MA0341.1_MSN2        | 1.0042e-03     | -GGGGAGG<br>AGGGG---                 |              |
| MA0342.1_MSN4        | 1.0045e-03     | -GGGGAGG<br>AGGGG---                 |              |
| MA0366.1_RGM1        | 1.0774e-03     | CCTCCCC-<br>---CCCCT                 |              |
| MA0057.1_MZF1_5-13   | 1.7396e-03     | CCTCCCC----<br>-NTNCCCCTMN           |              |
| MA0456.1_opa         | 1.8160e-03     | ----GGGGAGG-<br>CNGCGGGGGK           |              |

M35



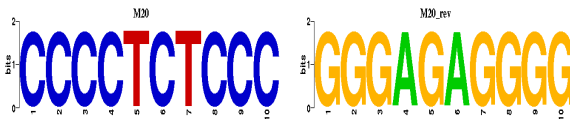
|                   | <i>forward</i> | <i>reverse compliment</i>                              |              |
|-------------------|----------------|--|--------------|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>                                       | <i>Motif</i> |
| MA0079.2_SP1      | 2.7288e-07     | GGGGGAGGTGAGGC<br>GGGGNGGGG----                        |              |
| MA0056.1_MZF1_1-4 | 2.8452e-04     | GCCTCACCTCCCC<br>-----TCCCN                            |              |
| MA0073.1_RREB1    | 7.7478e-04     | -----GGGGAGGTGAGGC-<br>NGKKKGKGGGTGKTTTGGG             |              |
| MA0103.1_ZEB1     | 7.9442e-04     | GGGGAGGTGAGGC<br>----NAGGTG----                        |              |
| MA0086.1_sna      | 9.4481e-04     | GCCTCACCTCCCC<br>----CACCTG----                        |              |
| MA0450.1_hkb      | 1.0264e-03     | GCCTCACCTCCCC<br>---TCACGCCM--                         |              |
| MA0283.1_CHA4     | 1.1987e-03     | GCCTCACCTCCCC<br>-----NCTCCGC                          |              |
| MA0443.1_btd      | 1.4138e-03     | GCCTCACCTCCCC-<br>-----YCCGCCMCN                       |              |
| MA0123.1_abi4     | 1.5514e-03     | GGGGAGGTGAGGC<br>NGNNGCRSCG----                        |              |
| MA0068.1_Pax4     | 1.7269e-03     | ---GGGGAGGTGAGGC-----<br>GKRNNNNKNNNNNNNNNNKNNWWWTWTTY |              |

**M14**



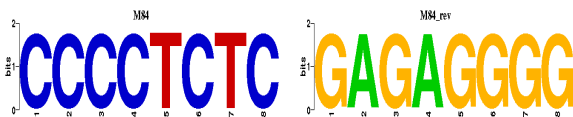
|                     | <i>forward</i> | <i>reverse compliment</i>               |              |
|---------------------|----------------|---|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i> |
| MA0079.2_SP1        | 7.7889e-06     | --GGGAGGGAA<br>GGGGNGGGG--              |              |
| MA0149.1_EWSR1-FLI1 | 5.2925e-05     | -----TTCCCTCCC---<br>CCTTCCTTCCTTCCTTCC |              |
| MA0290.1_DAL81      | 6.9142e-05     | -TTCCCTCCC-----<br>AATCCCGCCCGGGCTTTT   |              |
| MA0410.1_UGA3       | 1.0711e-04     | GGGAGGGAA<br>NGGCGGGA-                  |              |
| MA0450.1_hkb        | 7.3410e-04     | TTCCCTCCC-<br>-TCACGCCCM                |              |
| MA0366.1_RGM1       | 2.9116e-03     | GGGAGGGAA<br>---AGGGG-                  |              |
| MA0342.1_MSN4       | 3.2069e-03     | TTCCCTCCC<br>-CCCCT---                  |              |
| MA0009.1_T          | 4.2582e-03     | --GGGAGGGAA<br>CTAGGTGTGAA              |              |
| MA0039.2_Klf4       | 4.6020e-03     | TTCCCTCCC-<br>GCCMCRCCCN                |              |
| MA0341.1_MSN2       | 5.8483e-03     | GGGAGGGAA<br>---AGGGG-                  |              |




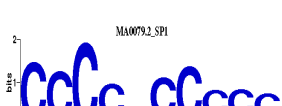

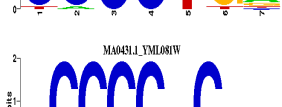

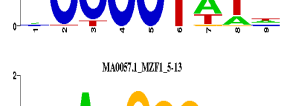
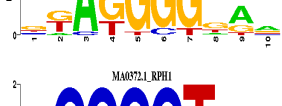
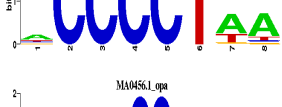
M20



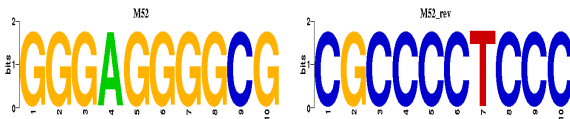
|                     | <i>forward</i> | <i>reverse compliment</i>                              |              |
|---------------------|----------------|--|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                                       | <i>Motif</i> |
| MA0079.2_SP1        | 1.1703e-10     | CCCCTCTCCC<br>CCCCNCCCC                                |              |
| MA0323.1_IXR1       | 1.9653e-06     | CCCCTCTCCC-----<br>CMCCGCTTCCGGYTT                     |              |
| MA0366.1_RGM1       | 6.3946e-06     | CCCCTCTCCC<br>CCCCT-----                               |              |
| MA0342.1_MSN4       | 6.7232e-06     | GGGAGAGGGG<br>-----AGGGG                               |              |
| MA0341.1_MSN2       | 1.6824e-05     | GGGAGAGGGG<br>-----AGGGG                               |              |
| MA0068.1_Pax4       | 2.1501e-04     | -----CCCCTCTCCC---<br>RAAWAWWWNNMNNNNNNNNNNNNMNNNNNYMC |              |
| MA0364.1_REI1       | 6.7413e-04     | GGGAGAGGGG<br>---NCAGGGG                               |              |
| MA0431.1_YML081W    | 1.7052e-03     | GGGAGAGGGG--<br>--NWGNGGGGN                            |              |
| MA0065.2_PPARG_RXRA | 1.7132e-03     | -CCCCTCTCCC-----<br>TGMCCTTTGNCCYNN                    |              |
| MA0423.1_YER130C    | 1.8086e-03     | GGGAGAGGGG--<br>--NAWAGGGGN                            |              |

**M84**



|                    | <i>forward</i> | <i>reverse compliment</i>  |   |
|--------------------|----------------|----------------------------|---|
| <i>Name</i>        | <i>E value</i> | <i>Alignment</i>           | <i>Motif</i>  |
| MA0366.1_RGM1      | 1.7889e-06     | CCCCTCTC<br>CCCCT---       |    |
| MA0342.1_MS4       | 1.8863e-06     | GAGAGGGG<br>---AGGGG       |    |
| MA0341.1_MS2       | 4.9834e-06     | GAGAGGGG<br>---AGGGG       |    |
| MA0079.2_SP1       | 6.1871e-06     | --GAGAGGGG<br>GGGGGNGGGG   |    |
| MA0364.1_REI1      | 1.6870e-04     | GAGAGGGG<br>-NCAGGGG       |    |
| MA0431.1_YML081W   | 2.4547e-04     | GAGAGGGG-<br>NWGNGGGGN     |   |
| MA0423.1_YER130C   | 2.6382e-04     | GAGAGGGG-<br>NAWAGGGGN     |  |
| MA0057.1_MZF1_5-13 | 3.4112e-04     | GAGAGGGG---<br>-NKAGGGGNAN |  |
| MA0372.1_RPH1      | 6.1244e-04     | GAGAGGGG-<br>-TTAGGGGN     |  |
| MA0456.1_opa       | 6.8441e-04     | GAGAGGGG----<br>CNGCGGGGGK |  |

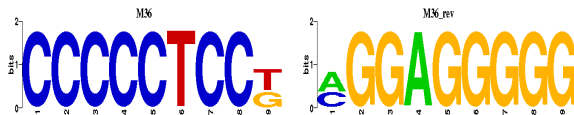
**M52**





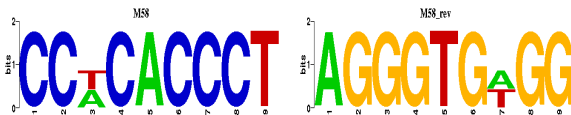
|               | <i>forward</i> | <i>reverse compliment</i>                              |              |
|---------------|----------------|--|--------------|
| <i>Name</i>   | <i>E value</i> | <i>Alignment</i>                                       | <i>Motif</i> |
| MA0079.2_SP1  | 4.0231e-08     | CGCCCCTCCC--<br>--CCCNCCCCC                            |              |
| MA0039.2_Klf4 | 2.9034e-07     | CGCCCCTCCC-<br>-GCCMCRCCCN                             |              |
| MA0366.1_RGM1 | 6.3946e-06     | CGCCCCTCCC<br>--CCCCT---                               |              |
| MA0342.1_MS4  | 6.7232e-06     | GGGAGGGGCG<br>---AGGGG--                               |              |
| MA0341.1_MS2  | 1.6824e-05     | GGGAGGGGCG<br>---AGGGG--                               |              |
| MA0443.1_btd  | 1.3991e-04     | --CGCCCCTCCC<br>YCCGCCCMCN--                           |              |
| MA0450.1_hkb  | 2.4009e-04     | ---CGCCCCTCCC<br>TCACGCCCM----                         |              |
| MA0364.1_REI1 | 6.7413e-04     | GGGAGGGGCG<br>-NCAGGGG--                               |              |
| MA0068.1_Pax4 | 1.0743e-03     | -----CGCCCCTCCC-----<br>RAAWAWWWNNMNNNNNNNNNNMNNNNNYMC |              |
| MA0456.1_opa  | 1.0778e-03     | ---GGGAGGGGCG<br>CNGCGGGGGGKC-                         |              |

M36



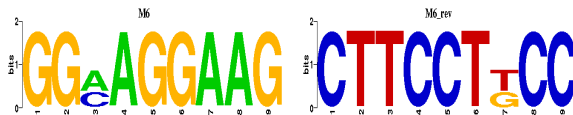
|                    | <i>forward</i> | <i>reverse compliment</i>        |              |
|--------------------|----------------|----------------------------------|--------------|
| <i>Name</i>        | <i>E value</i> | <i>Alignment</i>                 | <i>Motif</i> |
| MA0366.1_RGM1      | 3.9735e-06     | CCCCCTCCK<br>-CCCCT---           |              |
| MA0342.1_MSN4      | 4.1814e-06     | MGGAGGGGG<br>---AGGGG-           |              |
| MA0079.2_SP1       | 5.7726e-06     | --MGGAGGGGG<br>GGGGGNGGGG-       |              |
| MA0057.1_MZF1_5-13 | 9.1656e-06     | MGGAGGGGG--<br>-NKAGGGGNAN       |              |
| MA0341.1_MSN2      | 1.0637e-05     | MGGAGGGGG<br>---AGGGG-           |              |
| MA0456.1_opa       | 6.5673e-05     | -MGGAGGGGG--<br>CNGCGGGGGGKC     |              |
| MA0364.1_REI1      | 3.8715e-04     | MGGAGGGGG<br>-NCAGGGG-           |              |
| MA0155.1_INSM1     | 6.8336e-04     | --CCCCCTCCK-<br>YGCCCCCTGRCA     |              |
| MA0431.1_YML081W   | 7.8983e-04     | MGGAGGGGG<br>NWNNGGGGN           |              |
| MA0163.1_PLAG1     | 1.0338e-03     | -----MGGAGGGGG<br>GGGGCCNAAGGGGG |              |





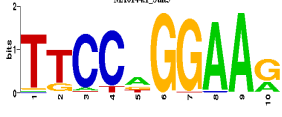
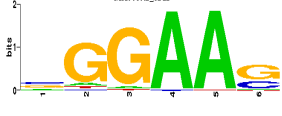
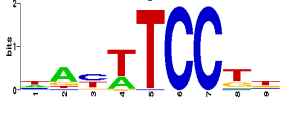
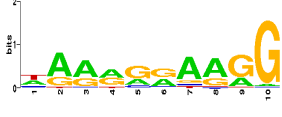
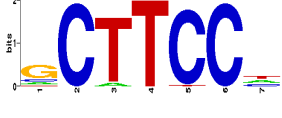

M58



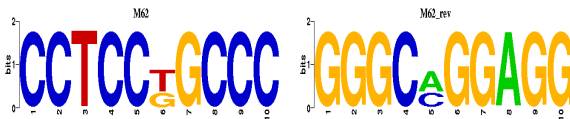
|                | <i>forward</i> | <i>reverse compliment</i>                   |              |
|----------------|----------------|---|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                            | <i>Motif</i> |
| MA0039.2_Klf4  | 2.0007e-06     | -CCWCACCCT<br>GCCMCRCCCN                    |              |
| MA0270.1_AFT2  | 2.9486e-04     | AGGGTGWGG<br>NGGGTGTN-                      |              |
| MA0112.2_ESR1  | 3.1753e-04     | -----AGGGTGWGG-----<br>RGGTCANNNTGACCTNNNNN |              |
| MA0332.1_MET28 | 6.3962e-04     | CCWCACCCT<br>CCACAG---                      |              |
| MA0009.1_T     | 1.5963e-03     | -AGGGTGWGG-<br>CTAGGTGTGAA                  |              |
| MA0079.2_SP1   | 1.8569e-03     | --CCWCACCCCT<br>CCCCNCCCCC-                 |              |
| MA0450.1_hkb   | 2.3785e-03     | CCWCACCCT<br>TCACGCCCM                      |              |
| MA0366.1_RGM1  | 2.9116e-03     | AGGGTGWGG<br>AGGGG----                      |              |
| MA0258.1_ESR2  | 3.1842e-03     | -----AGGGTGWGG--<br>NNRGGTCANNNTGNCCCN      |              |
| MA0342.1_MSNA  | 3.2069e-03     | CCWCACCCT<br>----CCCCCT                     |              |

M6



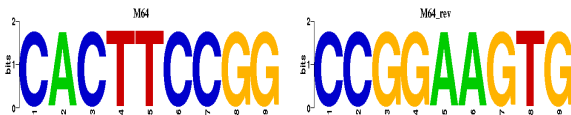
|                     | <i>forward</i> | <i>reverse compliment</i>             |   |
|---------------------|----------------|---------------------------------------|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                      | <i>Motif</i>  |
| MA0149.1_EWSR1-FLI1 | 1.6366e-11     | -CTTCCTKCC-----<br>CCTTCCTTCCTTCCTTCC |    |
| MA0080.2_SPI1       | 6.4951e-07     | -CTTCCTKCC<br>ACTTCCT---              |    |
| MA0156.1_FEV        | 6.2196e-06     | -CTTCCTKCC<br>AYTTCCTG--              |    |
| MA0026.1_Eip74EF    | 2.6261e-05     | CTTCCTKCC<br>YTTCGG--                 |    |
| MA0144.1_Stat3      | 2.6886e-05     | CTTCCTKCC-<br>CTTCNGGAA               |    |
| MA0080.1_SPI1       | 9.1317e-05     | CTTCCTKCC<br>STTCN---                 |   |
| MA0136.1_ELF5       | 3.7812e-04     | GGMAGGAAG--<br>--NMGGAARTN            |  |
| MA0039.1_Klf4       | 3.8637e-04     | GGMAGGAAG-<br>NAARRRAAGG              |  |
| MA0305.1_GCR2       | 3.8743e-04     | -CTTCCTKCC<br>GCTTCN---               |  |
| MA0323.1_IXR1       | 7.7117e-04     | -----CTTCCTKCC-<br>CMCCGCTTCGGYTT     |  |

**M62**



|                  | <i>forward</i> | <i>reverse compliment</i>              |              |
|------------------|----------------|--|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                       | <i>Motif</i> |
| MA0079.2_SP1     | 6.6211e-05     | -GGGCMGGAGG<br>GGGGNGGGG-              |              |
| MA0026.1_Eip74EF | 1.2490e-04     | GGGCMGGAGG<br>---CCGGAAR               |              |
| MA0410.1_UGA3    | 7.6356e-04     | CCTCCKGCCC<br>--TCCC GCCN              |              |
| MA0443.1_btd     | 8.9186e-04     | --GGGCMGGAGG<br>NGKGGGCGGR--           |              |
| MA0290.1_DAL81   | 9.7234e-04     | CCTCCKGCCC-----<br>AATCCC GCCCGGGCTTTT |              |
| MA0163.1_PLAG1   | 2.0253e-03     | ---CCTCCKGCCC-<br>CCCCCTTNGGCCCC       |              |
| MA0344.1_NHP10   | 2.2919e-03     | GGGCMGGAGG<br>--NCCGGGGA               |              |
| MA0086.1_sna     | 2.4145e-03     | CCTCCKGCCC<br>-CACCTG---               |              |
| MA0156.1_FEV     | 2.6849e-03     | -CCTCCKGCCC<br>AYTTCCTG---             |              |
| MA0280.1_CAT8    | 2.9590e-03     | CCTCCKGCCC<br>-NTCCG---                |              |

**M64**

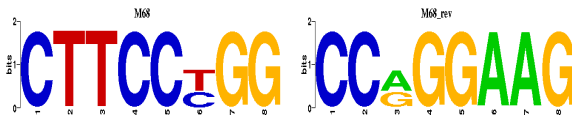


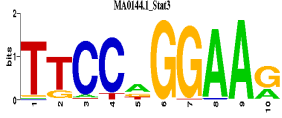



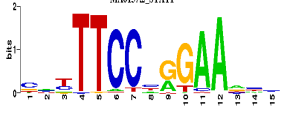
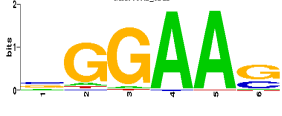
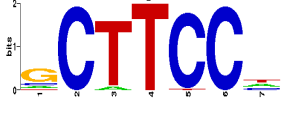


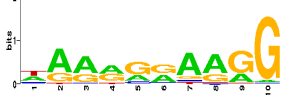
*forward*

*reverse compliment*

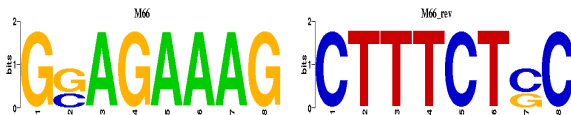
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i> |
|------------------|----------------|------------------------------------|--------------|
| MA0062.2_GABPA   | 1.9096e-14     | --CACTTCCGG<br>NNCACTTCCGG         |              |
| MA0076.1_ELK4    | 1.4762e-11     | CACTTCCGG--<br>-ACTTCCGGT          |              |
| MA0062.1_GABPA   | 1.9587e-11     | CACTTCCGG--<br>SNCTTCCGGT          |              |
| MA0026.1_Eip74EF | 5.1978e-10     | CACTTCCGG<br>--YTTCCGG             |              |
| MA0156.1_FEV     | 2.1456e-07     | CACTTCCGG<br>-AYTTCCTG             |              |
| MA0323.1_IXR1    | 4.8724e-07     | ---CACTTCCGG---<br>CMCCGCTTCCGGYTT |              |
| MA0275.1_ASQ1    | 5.1985e-07     | CACTTCCGG<br>---WTCCGG             |              |
| MA0080.2_SPI1    | 6.0487e-07     | CACTTCCGG<br>-ACTTCCT-             |              |
| MA0028.1_ELK1    | 2.1712e-06     | CACTTCCGG---<br>--YTTCCGGNNN       |              |
| MA0311.1_HAL9    | 1.5017e-05     | CACTTCCGG<br>---TTCCG-             |              |

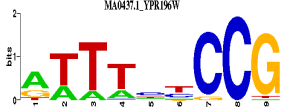


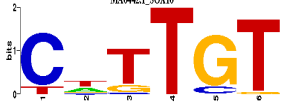



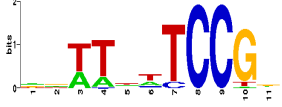


**M68**



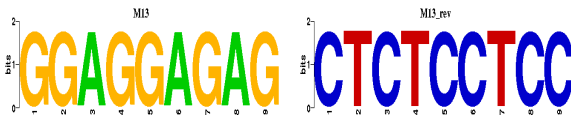
|                  | <i>forward</i> | <i>reverse compliment</i>         |   |
|------------------|----------------|-----------------------------------|---|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                  | <i>Motif</i>  |
| MA0144.1_Stat3   | 1.0876e-11     | CTTCCYGG--<br>CTTCCNGGAA          |    |
| MA0156.1_FEV     | 5.0484e-07     | -CTTCCYGG<br>AYTTCCTG-            |    |
| MA0080.2_SPI1    | 8.0022e-07     | -CTTCCYGG<br>ACTTCCT--            |    |
| MA0026.1_Eip74EF | 3.0488e-06     | CTTCCYGG<br>YTCCGG-               |    |
| MA0137.2_STAT1   | 3.0504e-06     | --CTTCCYGG-----<br>NNYTTCCNGGAANN |    |
| MA0080.1_SPI1    | 4.2939e-05     | CTTCCYGG<br>STTCN--               |   |
| MA0305.1_GCR2    | 1.6884e-04     | -CTTCCYGG<br>GCTTCN--             |  |
| MA0062.1_GABPA   | 2.2634e-04     | --CTTCCYGG<br>SNCTTCGGT           |  |
| MA0076.1_ELK4    | 2.2843e-04     | -CTTCCYGG<br>ACTTCGGT             |  |
| MA0039.1_Klf4    | 3.5901e-04     | -CCRGGAAG-<br>NAARRRAAG           |  |

**M66**



|                  | <i>forward</i> | <i>reverse compliment</i>  |   |
|------------------|----------------|----------------------------|---|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>           | <i>Motif</i>  |
| MA0437.1_YPR196W | 3.9207e-07     | -GSAGAAAG<br>CGGRNAAAT     |    |
| MA0287.1_CUP2    | 3.2673e-04     | --GSAGAAAG-<br>CAGCARAAAWG |    |
| MA0294.1_EDS1    | 4.2851e-04     | CTTTCTSC-<br>NTTNTTCCN     |    |
| MA0442.1_SOX10   | 4.3705e-04     | GSAGAAAG<br>--ACAAWG       |    |
| MA0080.2_SPI1    | 7.1211e-04     | -CTTTCTSC<br>ACTTCT--      |    |
| MA0422.1_YDR520C | 7.3644e-04     | CTTTCTSC--<br>NTAWNTCCGN   |   |
| MA0432.1_YNR063W | 7.6369e-04     | --GSAGAAAG<br>TCGGAGAT--   |  |
| MA0367.1_RGT1    | 1.6610e-03     | --GSAGAAAG-<br>NCGANNAANN  |  |
| MA0354.1_PDR8    | 1.7267e-03     | CTTTCTSC--<br>--ATCTCCGN   |  |
| MA0053.1_MNB1A   | 1.7687e-03     | -CTTTCTSC<br>NCTTT----     |  |

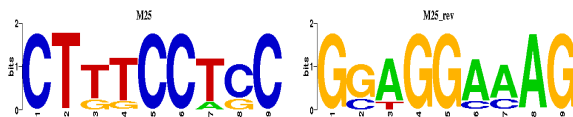
**M13**





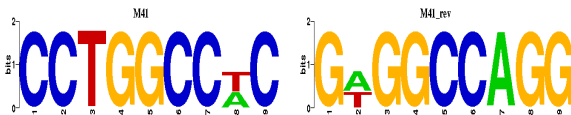
|                     | <i>forward</i> | <i>reverse compliment</i>                            |              |
|---------------------|----------------|--|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                                     | <i>Motif</i> |
| MA0079.2_SP1        | 6.4883e-05     | -CTCTCCTCC<br>CCCCNCCCCC                             |              |
| MA0283.1_CHA4       | 1.0413e-04     | CTCTCCTCC<br>-NCTCCGCC                               |              |
| MA0299.1_GAL4       | 6.5565e-04     | -----CTCTCCTCC-<br>GANNRNTNTNNNCCG                   |              |
| MA0090.1_TEAD1      | 9.3551e-04     | -GGAGGAGAG--<br>CNSWGGAAATGTR                        |              |
| MA0062.1_GABPA      | 1.3055e-03     | CTCTCCTCC---<br>--SNCTTCCGGT                         |              |
| MA0354.1_PDR8       | 1.5359e-03     | CTCTCCTCC<br>ATCTCCGN-                               |              |
| MA0432.1_YNR063W    | 1.6070e-03     | GGAGGAGAG<br>-TCGAGAT                                |              |
| MA0081.1_SPIB       | 1.7388e-03     | GGAGGAGAG<br>ASMGAA--                                |              |
| MA0068.1_Pax4       | 7.7535e-03     | -----GGAGGAGAG-----<br>GKRNNNNKNNNNNNNNNNKNNWWWTWT Y |              |
| MA0140.1_Tal1_Gata1 | 7.9347e-03     | -----CTCTCCTCC-----<br>NTTATCTNNNNNNNNNCNN           |              |

M25



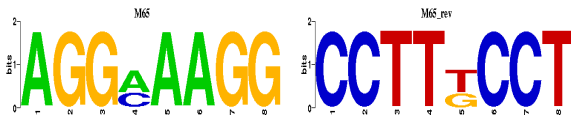
|                     | <i>forward</i> | <i>reverse compliment</i>           |              |
|---------------------|----------------|-------------------------------------|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                    | <i>Motif</i> |
| MA0090.1_TEAD1      | 1.3615e-07     | —GGAGGAAAG—<br>CNSWGGGAATGTR        |              |
| MA0081.1_SPIB       | 8.6810e-06     | CTTTCCTCC<br>—TTCKST                |              |
| MA0326.1_MAC1       | 9.9856e-05     | GGAGGAAAG<br>YGAGCAA—               |              |
| MA0156.1_FEV        | 1.3493e-04     | CTTTCCTCC<br>AYTTCCTG—              |              |
| MA0152.1_NFATC2     | 6.1151e-04     | GGAGGAAAG<br>—TGAAAA                |              |
| MA0080.2_SPI1       | 8.2062e-04     | CTTTCCTCC<br>ACTTCCT—               |              |
| MA0149.1_EWSR1-FL11 | 8.4181e-04     | CTTTCCTCC-----<br>CCTTCCTTCCTTCCTTC |              |
| MA0243.1_sd         | 1.0018e-03     | —GGAGGAAAG—<br>NYNNNRAATKWN         |              |
| MA0299.1_GAL4       | 1.5073e-03     | -----CTTTCCTCC—<br>GANNRNTNTNNNCCG  |              |
| MA0039.1_Klf4       | 1.6497e-03     | —CTTTCCTCC<br>CCTTYYYTTN            |              |

**M41**



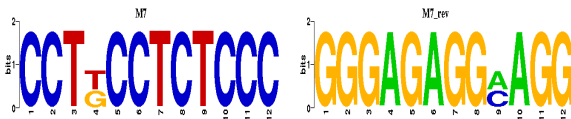
|                  | <i>forward</i> | <i>reverse compliment</i>               |              |
|------------------|----------------|---|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i> |
| MA0381.1_SKN7    | 2.6301e-04     | CCTGGCCWC<br>-NYGGCC--                  |              |
| MA0368.1_RIM101  | 2.1210e-03     | GWGGCCAGG<br>--YGCCAAG                  |              |
| MA0097.1_bZIP911 | 3.6921e-03     | GWGGCCAGG-----<br>--GGCCACGTCAYC        |              |
| MA0112.2_ESR1    | 3.7703e-03     | GWGGCCAGG-----<br>-RGGTCANNNTGACCTNNNNN |              |
| MA0334.1_MET32   | 5.5282e-03     | -GWGGCCAGG<br>TGTGGCN---                |              |
| MA0344.1_NHP10   | 7.0944e-03     | --CCTGGCCWC<br>TCCCCGGN---              |              |
| MA0373.1_RPN4    | 7.6050e-03     | CCTGGCCWC-<br>---CGCCACC                |              |
| MA0365.1_RFX1    | 9.0872e-03     | CCTGGCCWC-<br>--TRGCAACN                |              |
| MA0018.2_CREB1   | 9.5044e-03     | CCTGGCCWC-<br>--TGACGTCA                |              |
| MA0161.1_NFIC    | 9.6539e-03     | GWGGCCAGG<br>--NGCCAA-                  |              |


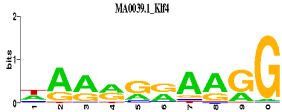

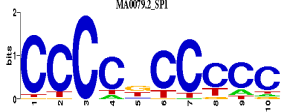

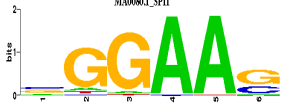




**M65**



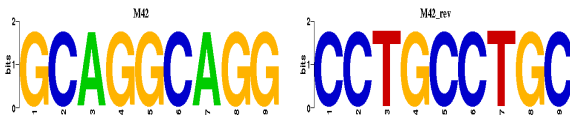
|                     | <i>forward</i> | <i>reverse compliment</i>            |              |
|---------------------|----------------|--------------------------------------|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                     | <i>Motif</i> |
| MA0039.1_Klf4       | 2.8718e-06     | CCTTKCCT--<br>CCTTYYYTTN             |              |
| MA0156.1_FEV        | 7.3879e-05     | CCTTKCCT-<br>-AYTTCCTG               |              |
| MA0152.1_NFATC2     | 6.2923e-04     | AGGMAAGG<br>TGGAAAA-                 |              |
| MA0080.2_SPI1       | 7.0213e-04     | CCTTKCCT<br>-ACTTCCT                 |              |
| MA0136.1_ELF5       | 1.2561e-03     | -AGGMAAGG<br>NMGGAARTN               |              |
| MA0081.1_SPIB       | 1.7803e-03     | CCTTKCCT--<br>---TTCKST              |              |
| MA0065.2_PPARG_RXRA | 1.7873e-03     | ---CCTTKCCT---<br>TGMCCCTTGNCYNN     |              |
| MA0438.1_YRM1       | 1.9922e-03     | CCTTKCCT-<br>-ATNTCCGN               |              |
| MA0051.1_IRF2       | 2.1272e-03     | AGGMAAGG-----<br>-SGAAAGYGAAASYNWWNN |              |
| MA0277.1_AZF1       | 2.9320e-03     | ---AGGMAAGG<br>AAAAAGAAA--           |              |


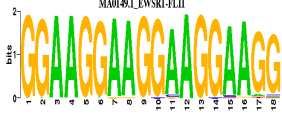
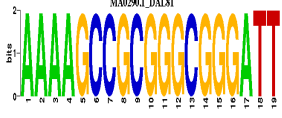

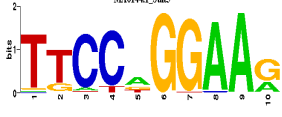





M7



|                     | <i>forward</i> | <i>reverse compliment</i>                |   |
|---------------------|----------------|--|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                         | <i>Motif</i>  |
| MA0081.1_SPIB       | 1.3371e-06     | CCTKCCTCTCCC<br>--TTCKST---              |    |
| MA0039.1_Klf4       | 1.4960e-05     | GGGAGAGGMAGG<br>--NAARRRAAGG             |    |
| MA0080.2_SPI1       | 5.7050e-05     | CCTKCCTCTCCC<br>ACTTCCT-----             |    |
| MA0079.2_SPI1       | 6.0801e-04     | CCTKCCTCTCCC<br>--CCCNCCCC               |    |
| MA0149.1_EWSR1-FLI1 | 9.4820e-04     | --GGGAGAGGMAGG----<br>GGAAGGAAGGAAGGAAGG |    |
| MA0080.1_SPI1       | 2.5069e-03     | CCTKCCTCTCCC<br>-STTCN-----              |   |
| MA0156.1_FEV        | 4.9261e-03     | CCTKCCTCTCCC<br>AYTTCCTG----             |  |
| MA0354.1_PDR8       | 6.4782e-03     | CCTKCCTCTCCC-<br>-----ATCTCCGN           |  |
| MA0432.1_YNR063W    | 6.7309e-03     | -GGGAGAGGMAGG<br>TCGGAGAT-----           |  |
| MA0370.1_RME1       | 6.9006e-03     | CCTKCCTCTCCC<br>--TNCCTTTNNA             |  |

M42



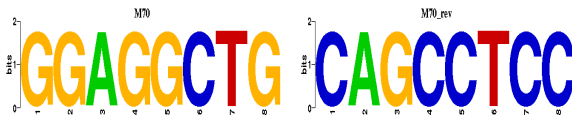
|                     | <i>forward</i> | <i>reverse compliment</i>                |   |
|---------------------|----------------|--|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                         | <i>Motif</i>  |
| MA0340.1_MOT3       | 7.0835e-05     | CCTGCCTGC<br>--TRCCTN-                   |    |
| MA0149.1_EWSR1-FLI1 | 2.7825e-04     | CCTGCCTGC-----<br>CCTTCCTTCCTTCCTTCC     |    |
| MA0290.1_DAL81      | 3.9565e-04     | ---CCTGCCTGC-----<br>AATCCCGCCCGCGGCTTTT |    |
| MA0156.1_FEV        | 9.6188e-04     | CCTGCCTGC<br>AYTTCCTG-                   |    |
| MA0144.1_Stat3      | 1.0062e-03     | CCTGCCTGC--<br>-CTTCCNGGAA               |    |
| MA0026.1_Eip74EF    | 2.3196e-03     | CCTGCCTGC<br>-YTTCCGG-                   |   |
| MA0080.2_SPI1       | 2.4354e-03     | CCTGCCTGC<br>ACTTCCT--                   |  |
| MA0405.1_TEA1       | 2.8339e-03     | CCTGCCTGC<br>-NWGYSCGC                   |  |
| MA0086.1_sna        | 1.0436e-02     | --CCTGCCTGC<br>CACCTG----                |  |
| MA0417.1_YAP5       | 1.1575e-02     | GCAGGCAGG<br>--AAGCAT-                   |  |

M81



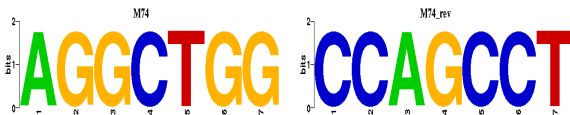
|                   | <i>forward</i> | <i>reverse compliment</i>      |              |
|-------------------|----------------|--------------------------------|--------------|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>               | <i>Motif</i> |
| MA0213.1_brk      | 9.8307e-05     | -GAGCCAG<br>RGCGCCRS           |              |
| MA0092.1_Hand1_T  | 4.8725e-04     | GAGCCAG---<br>NWNCCAGAYN       |              |
| MA0272.1_ARG81    | 1.0734e-03     | -GAGCCAG<br>NGAGTCAN           |              |
| MA0326.1_MAC1     | 1.1147e-03     | -GAGCCAG<br>YGAGCAAA           |              |
| MA0099.2_API      | 1.1482e-03     | -GAGCCAG<br>TGAGTCA-           |              |
| MA0145.1_Tcfcp211 | 1.4897e-03     | CTGGCTC-----<br>CYGGNTNNRNCYGG |              |
| MA0285.1_CRZ1     | 2.8526e-03     | CTGGCTC--<br>GNGGCTNNN         |              |
| MA0161.1_NFIC     | 3.1563e-03     | GAGCCAG<br>-NGCCAA             |              |
| MA0024.1_E2F1     | 3.7356e-03     | GAGCCAG-<br>GCGCSAAA           |              |
| MA0099.1_Fos      | 4.0588e-03     | CTGGCTC--<br>-TGANTCAC         |              |

**M70**



|                     | <i>forward</i> | <i>reverse compliment</i>                |              |
|---------------------|----------------|--|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                         | <i>Motif</i> |
| MA0412.1_UME6       | 4.2425e-04     | ---CAGCCTCC--<br>AWWTAGCCGCCSA           |              |
| MA0079.2_SP1        | 6.2021e-04     | GGAGGCTG--<br>GGGGNGGGG                  |              |
| MA0305.1_GCR2       | 1.3194e-03     | -GGAGGCTG<br>NGGAAGC--                   |              |
| MA0373.1_RPN4       | 1.8512e-03     | CAGCCTCC<br>-CGCCACC                     |              |
| MA0443.1_btd        | 2.2619e-03     | -CAGCCTCC-<br>YCCGCCMCN                  |              |
| MA0304.1_GCR1       | 5.0561e-03     | CAGCCTCC-<br>-GGCTTCCA                   |              |
| MA0285.1_CRZ1       | 6.8474e-03     | GGAGGCTG--<br>-GNGGCTNNN                 |              |
| MA0100.1_Myb        | 1.4175e-02     | CAGCCTCC<br>CAACNGYC                     |              |
| MA0140.1_Tal1_Gata1 | 1.4857e-02     | -----CAGCCTCC-----<br>NTTATCTNNNNNNNNCNN |              |
| MA0271.1_ARG80      | 1.7014e-02     | CAGCCTCC<br>-WGACNC-                     |              |

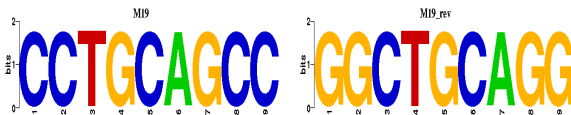
M74





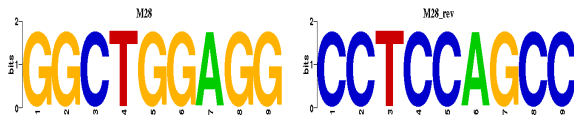
|                   | <i>forward</i> | <i>reverse compliment</i>                 |              |
|-------------------|----------------|---|--------------|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>                          | <i>Motif</i> |
| MA0267.1_ACE2     | 5.4064e-05     | AGGCTGG-<br>-NGCTGGN                      |              |
| MA0402.1_SWI5     | 1.6619e-04     | AGGCTGG--<br>-TGCTGGTN                    |              |
| MA0079.1_SP1      | 1.8744e-03     | --CCAGCCT-<br>ACCCNGCCNN                  |              |
| MA0410.1_UGA3     | 2.3159e-03     | -CCAGCCT<br>TCCCGCCN                      |              |
| MA0092.1_Hand1_T  | 1.0505e-02     | ---CCAGCCT<br>NWNCCAGAYN                  |              |
| MA0079.2_SP1      | 1.1555e-02     | --AGGCTGG-<br>GGGGGNGGGG                  |              |
| MA0112.2_ESR1     | 1.2164e-02     | -----AGGCTGG-----<br>RGGTCANNNTGACCTNNNNN |              |
| MA0088.1_znf143   | 1.6707e-02     | -----AGGCTGG-----<br>KCNNKGMANNMTGGGANNNN |              |
| MA0340.1_MOT3     | 2.2309e-02     | CCAGCCT-<br>--TRCCTN                      |              |
| MA0145.1_Tcfcp2l1 | 2.2530e-02     | -----AGGCTGG<br>CYGGNTNNRNCYGG            |              |

M19



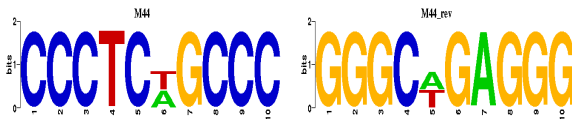
|                | <i>forward</i> | <i>reverse compliment</i>                    |              |
|----------------|----------------|--|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                             | <i>Motif</i> |
| MA0055.1_Myf   | 1.6358e-03     | CCTGCAGCC----<br>-CAGCAGYTG CYK              |              |
| MA0324.1_LEU3  | 1.9044e-03     | -GGCTGCAGG<br>CCGGNNNMGG                     |              |
| MA0385.1_SOK2  | 2.9280e-03     | GGCTGCAGG--<br>NNMTGCAKNNN                   |              |
| MA0260.1_che-1 | 5.9806e-03     | GGCTGCAGG<br>GGYTTC---                       |              |
| MA0402.1_SWI5  | 7.6718e-03     | GGCTGCAGG--<br>---TGCTGGTN                   |              |
| MA0410.1_UGA3  | 7.9505e-03     | CCTGCAGCC-<br>--TCCC GCCN                    |              |
| MA0304.1_GCR1  | 1.0279e-02     | CCTGCAGCC<br>-TGGAAGCC                       |              |
| MA0086.1_sna   | 1.0436e-02     | --CCTGCAGCC<br>CACCTG-----                   |              |
| MA0269.1_AFT1  | 1.1445e-02     | -----GGCTGCAGG-----<br>NNNNNNGGGTGCAMTANNNNN |              |
| MA0213.1_brk   | 1.2721e-02     | CCTGCAGCC<br>-SYGGCGCY                       |              |

M28



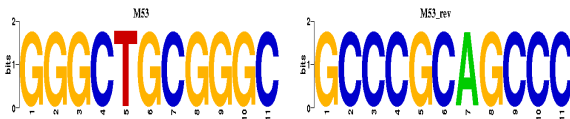
|                  | <i>forward</i> | <i>reverse compliment</i>            |              |
|------------------|----------------|--------------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                     | <i>Motif</i> |
| MA0410.1_UGA3    | 1.0711e-04     | CCTCCAGCC--<br>--TCCCGCCN            |              |
| MA0267.1_ACE2    | 3.9729e-04     | GGCTGGAGG<br>NGCTGGN--               |              |
| MA0402.1_SWI5    | 1.5039e-03     | GGCTGGAGG<br>TGCTGGTN-               |              |
| MA0130.1_ZNF354C | 1.5817e-03     | GGCTGGAGG<br>--GTGGAK-               |              |
| MA0155.1_INSM1   | 5.2335e-03     | --CCTCCAGCC-<br>YGCCCCCTGRCA         |              |
| MA0290.1_DAL81   | 7.2422e-03     | CCTCCAGCC-----<br>AATCCCGCCCGCGCTTTT |              |
| MA0456.1_opa     | 9.0588e-03     | -GGCTGGAGG--<br>CNGCGGGGGGK          |              |
| MA0304.1_GCR1    | 1.1322e-02     | --CCTCCAGCC<br>GGCTTCCA---           |              |
| MA0373.1_RPN4    | 1.2403e-02     | CCTCCAGCC<br>-CGCCACC-               |              |
| MA0144.1_Stat3   | 1.2682e-02     | --GGCTGGAGG<br>CTTCNGGAA-            |              |

M44



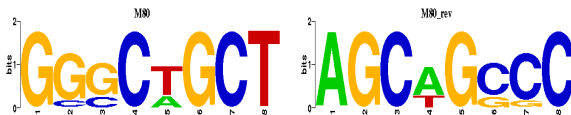
|                     | <i>forward</i> | <i>reverse compliment</i>            |              |
|---------------------|----------------|--------------------------------------|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                     | <i>Motif</i> |
| MA0065.2_PPARG_RXRA | 2.0860e-07     | --CCCTCWGCCC--<br>TGM CCTTTGNCCYNN   |              |
| MA0114.1_HNF4A      | 3.2553e-04     | -GGGCWGAGGG--<br>RGN NCA AAGKNCA     |              |
| MA0155.1_INSM1      | 7.2459e-04     | --CCCTCWGCCC<br>YGCC C C C TGRCA     |              |
| MA0283.1_CHA4       | 7.9351e-04     | CCCTCWGCCC<br>-NCTCCGCC-             |              |
| MA0163.1_PLAG1      | 1.9403e-03     | --CCCTCWGCCC--<br>CCCCCTTNGGCCCC     |              |
| MA0079.2_SP1        | 2.0608e-03     | GGGCWGAGGG--<br>-GGGGNGGGG           |              |
| MA0081.1_SPIB       | 3.6791e-03     | -CCCTCWGCCC<br>TTCKST----            |              |
| MA0366.1_RGM1       | 4.0551e-03     | GGGCWGAGGG--<br>-----AGGGG           |              |
| MA0140.1_Tal1_Gata1 | 4.3298e-03     | -CCCTCWGCCC-----<br>NTTATCTNNNNNNNNC |              |
| MA0342.1_MSN4       | 4.4538e-03     | -CCCTCWGCCC<br>CCCC-----             |              |




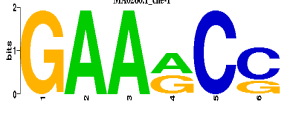
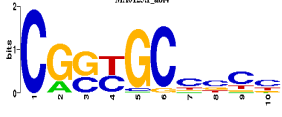



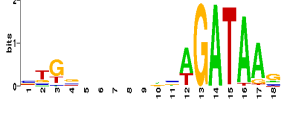
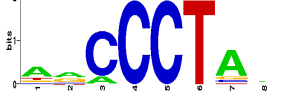
**M53**



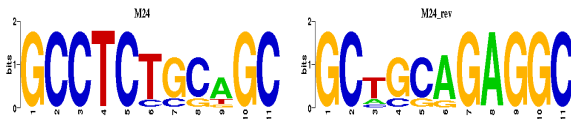
| <i>Name</i>         | <i>E value</i> | <i>forward</i>  | <i>reverse compliment</i> | <i>Alignment</i> | <i>Motif</i> |  |
|---------------------|----------------|-----------------|---------------------------|------------------|--------------|--|
| MA0290.1_DAL81      | 1.1378e-05     | -----GCCC       | CGCC--                    | AATCCC           | CGCCGCGCTTTT |  |
| MA0003.1_TFAP2A     | 1.7928e-04     | GGGCTGCGGGC     | --SCNNNNGGC               |                  |              |  |
| MA0155.1_INSM1      | 6.1063e-04     | -GCCC           | CGCC                      | YGCCCCCTGRCA     |              |  |
| MA0079.2_SP1        | 7.8930e-04     | GGGCTGCGGGC     | -GGGGNGGGG                |                  |              |  |
| MA0332.1_MET28      | 8.0586e-04     | GCCC            | CGCC                      | --CCACAG---      |              |  |
| MA0405.1_TEA1       | 1.0682e-03     | --GCCC          | CGCC                      | NWGYSCG-----     |              |  |
| MA0065.2_PPARG_RXRA | 1.4874e-03     | ---GGGCTGCGGGC- | NNRGGNCAAAGKCA            |                  |              |  |
| MA0399.1_SUT1       | 2.2367e-03     | GCCC            | CGCC                      | CCCCGCG----      |              |  |
| MA0123.1_abi4       | 2.8843e-03     | --GGGCTGCGGGC   | NGNNGCRSCG---             |                  |              |  |
| MA0048.1_NHLH1      | 3.1155e-03     | ---GGGCTGCGGGC  | NCGCAGCTGCGN--            |                  |              |  |

M80



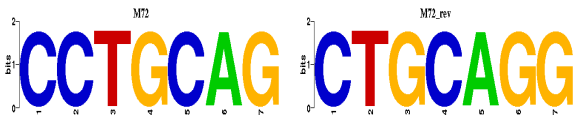
|                     | <i>forward</i> | <i>reverse compliment</i>              |   |
|---------------------|----------------|--|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                       | <i>Motif</i>  |
| MA0412.1_UME6       | 1.0019e-03     | ----AGCAGCCC--<br>AWWTAGCCGCCSA        |    |
| MA0055.1_Myf        | 1.5750e-03     | GGGCTGCT----<br>CAGCAGYTGCK            |    |
| MA0048.1_NHLH1      | 5.0250e-03     | GGGCTGCT----<br>NCGCAGCTGCGN           |    |
| MA0260.1_che-1      | 5.8655e-03     | GGGCTGCT<br>-GGYTTC-                   |    |
| MA0123.1_abi4       | 6.9555e-03     | --GGGCTGCT<br>NGNNGCRSCG               |    |
| MA0402.1_SWI5       | 8.3275e-03     | -AGCAGCCC<br>NACCAGCA-                 |   |
| MA0304.1_GCR1       | 1.2624e-02     | GGGCTGCT-<br>-GGCTTCCA                 |  |
| MA0418.1_YAP6       | 1.6854e-02     | -----AGCAGCCC<br>NNNNNTTACRTAAKNNNNYN  |  |
| MA0140.1_Tal1_Gata1 | 1.7395e-02     | ---AGCAGCCC-----<br>NTTATCTNNNNNNNNCNN |  |
| MA0403.1_TBF1       | 2.1904e-02     | ---GGGCTGCT<br>NTAGGGYT---             |  |

M24



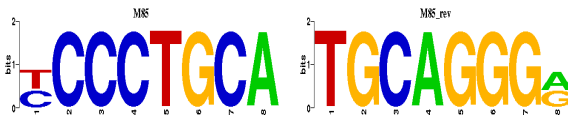
|                     | <i>forward</i> | <i>reverse compliment</i>                 |              |
|---------------------|----------------|---|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                          | <i>Motif</i> |
| MA0150.1_NFE2L2     | 1.3714e-03     | GCTGCAGAGGC--<br>--TGCTNWTGTCAY           |              |
| MA0055.1_Myf        | 1.4983e-03     | --GCCTCTGCAGC<br>MRGCARCTGCTG-            |              |
| MA0320.1_IME1       | 5.5143e-03     | GCCTCTGCAGC<br>--CTCGGCGG-                |              |
| MA0364.1_REI1       | 6.2389e-03     | GCTGCAGAGGC<br>---NCAGGG-                 |              |
| MA0065.2_PPARG_RXRA | 7.1191e-03     | --GCTGCAGAGGC--<br>NNRGGNCAAAGGKCA        |              |
| MA0370.1_RME1       | 8.1954e-03     | -GCCTCTGCAGC<br>TNCCTTTNNA--              |              |
| MA0456.1_opa        | 9.9445e-03     | --GCCTCTGCAGC<br>GMCCCCCGCNG-             |              |
| MA0081.1_SPIB       | 1.1156e-02     | -GCCTCTGCAGC<br>TTCKST-----               |              |
| MA0139.1_CTCF       | 1.2847e-02     | -----GCCTCTGCAGC---<br>NNSYGCCMCTRSTGGNNR |              |
| MA0321.1_INO2       | 1.5994e-02     | GCTGCAGAGGC<br>--TTCACATGC                |              |

M72



|                  | <i>forward</i> | <i>reverse compliment</i>    |              |
|------------------|----------------|------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>             | <i>Motif</i> |
| MA0385.1_SOK2    | 1.4091e-04     | --CTGCAGG--<br>NNMTGCAKNNN   |              |
| MA0402.1_SWI5    | 1.2864e-03     | CTGCAGG--<br>-TGCTGGTN       |              |
| MA0055.1_Myf     | 2.4802e-03     | CCTGCAG-----<br>-CAGCAGYTGCK |              |
| MA0086.1_sna     | 3.4527e-03     | --CCTGCAG<br>CACCTG---       |              |
| MA0026.1_Eip74EF | 5.7852e-03     | CTGCAGG<br>YTTCGG            |              |
| MA0144.1_Stat3   | 7.2212e-03     | ---CCTGCAG<br>CTTCCNGGAA     |              |
| MA0456.1_opa     | 8.1954e-03     | -----CCTGCAG<br>GMCCCCCGCNG  |              |
| MA0364.1_REI1    | 1.0481e-02     | CTGCAGG--<br>--NCAGGGG       |              |
| MA0076.1_ELK4    | 1.1955e-02     | -CTGCAGG-<br>ACTTCCGGT       |              |
| MA0324.1_LEU3    | 1.3977e-02     | ---CTGCAGG<br>CCGGNNMMGG     |              |

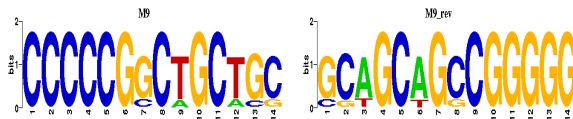
M85





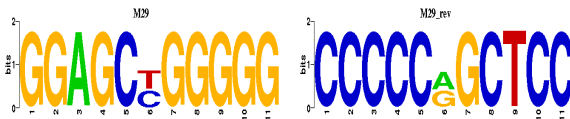
|                | <i>forward</i> | <i>reverse compliment</i>                  |              |
|----------------|----------------|--|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i> |
| MA0364.1_REI1  | 3.7106e-06     | TGCAGGGR<br>-NCAGGGG                       |              |
| MA0366.1_RGM1  | 4.0281e-05     | YCCCTGCA<br>CCCCT---                       |              |
| MA0342.1_MSN4  | 6.7588e-05     | YCCCTGCA<br>CCCCT---                       |              |
| MA0341.1_MSN2  | 1.4836e-04     | TGCAGGGR<br>---AGGGG                       |              |
| MA0413.1_USV1  | 1.5451e-04     | -----TGCAGGGR-----<br>NNNNNNTTCAGGGGKANNNN |              |
| MA0344.1_NHP10 | 2.2265e-04     | TGCAGGGR-<br>-NCCGGGGA                     |              |
| MA0456.1_opa   | 9.3251e-04     | -TGCAGGGR---<br>CNGCGGGGGGKC               |              |
| MA0155.1_INSM1 | 1.4918e-03     | ---YCCCTGCA-<br>YGCCCCCTGRCA               |              |
| MA0154.1_EBF1  | 1.7888e-03     | YCCCTGCA--<br>TCCCTNGGGN                   |              |
| MA0359.1_RAP1  | 2.6206e-03     | --YCCCTGCA<br>CACCCATACA                   |              |


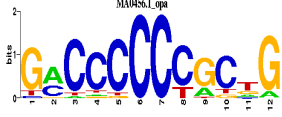
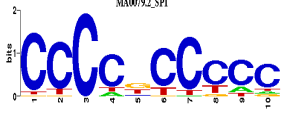
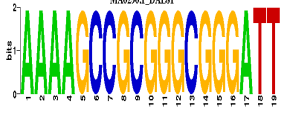

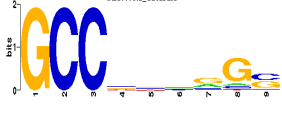




M9



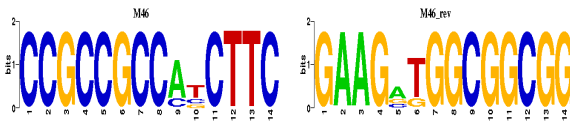
|                 | <i>forward</i> | <i>reverse compliment</i>                 |              |
|-----------------|----------------|---|--------------|
| <i>Name</i>     | <i>E value</i> | <i>Alignment</i>                          | <i>Motif</i> |
| MA0456.1_opa    | 1.4648e-07     | GCAGCAGCCGGGGG--<br>----CNGCGGGGGGK       |              |
| MA0344.1_NHP10  | 1.5238e-07     | CCCCGGCTGCTGC<br>TCCCCGN-----             |              |
| MA0055.1_Myf    | 3.5537e-05     | CCCCGGCTGCTGC--<br>----CAGCAGYTGCYK       |              |
| MA0290.1_DAL81  | 1.5705e-04     | -CCCCGGCTGCTGC----<br>AATCCCGCCCGCGGCTTTT |              |
| MA0003.1_TFAP2A | 4.9950e-04     | -CCCCGGCTGCTGC<br>SCNNNNGGC-----          |              |
| MA0048.1_NHLH1  | 6.6264e-04     | CCCCGGCTGCTGC--<br>----NCGCAGCTGCGN       |              |
| MA0362.1_RDS2   | 2.7781e-03     | CCCCGGCTGCTGC<br>-CCCCGAN-----            |              |
| MA0337.1_MIG1   | 3.0240e-03     | GCAGCAGCCGGGGG<br>-----SYGGGN             |              |
| MA0139.1_CTCF   | 3.5472e-03     | -----CCCCGGCTGCTGC<br>NNSYGCCMCTRSTGGNNR  |              |
| MA0341.1_MSN2   | 4.1435e-03     | GCAGCAGCCGGGGG<br>-----AGGGG              |              |

M29



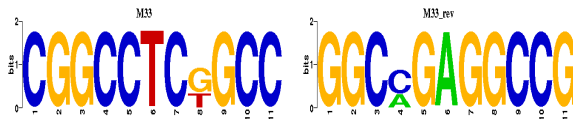
|                 | <i>forward</i> | <i>reverse compliment</i>                |   |
|-----------------|----------------|--|---|
| <i>Name</i>     | <i>E value</i> | <i>Alignment</i>                         | <i>Motif</i>  |
| MA0344.1_NHP10  | 6.9238e-07     | CCCCRGCTCC<br>TCCCCGGN---                |    |
| MA0456.1_opa    | 1.2607e-05     | GGAGCYGGGG--<br>-CNGCGGGGGGKC            |    |
| MA0079.2_SP1    | 5.1645e-05     | GGAGCYGGGGG<br>GGGGNGGGG-                |    |
| MA0290.1_DAL81  | 1.1564e-04     | -GGAGCYGGGGG-----<br>AAAAGCCGCGGGCGGGATT |    |
| MA0337.1_MIG1   | 5.0980e-04     | GGAGCYGGGGG<br>----SYGGGGN               |    |
| MA0003.1_TFAP2A | 1.0125e-03     | -CCCCRGCTCC<br>SCNNNNGGC---              |   |
| MA0339.1_MIG3   | 1.2216e-03     | GGAGCYGGGGG<br>---NGYGGGG-               |  |
| MA0338.1_MIG2   | 1.4475e-03     | GGAGCYGGGGG<br>---NGYGGGG-               |  |
| MA0404.1_TBS1   | 1.7677e-03     | -GGAGCYGGGGG<br>CGNTCCG----              |  |
| MA0335.1_MET4   | 1.8710e-03     | CCCCRGCTCC<br>-CCACAGNT--                |  |

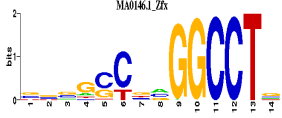
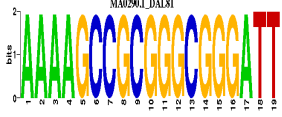
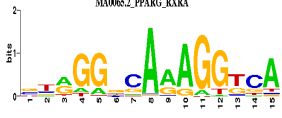







M46



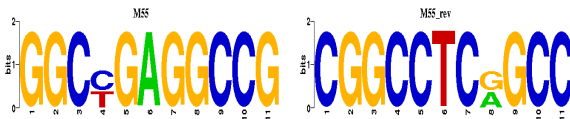
|                | <i>forward</i> | <i>reverse compliment</i>                  |              |
|----------------|----------------|--|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i> |
| MA0373.1_RPN4  | 1.8809e-05     | CCGCCGCCANCTTC<br>----CGCCACC---           |              |
| MA0320.1_IME1  | 1.6895e-04     | GAAGNTGGCGGCGG<br>-----CTCGGCGG            |              |
| MA0290.1_DAL81 | 4.2990e-04     | ----CCGCCGCCANCTTC-<br>AATCCCGCCCCGGGCTTTT |              |
| MA0394.1_STP1  | 4.4858e-04     | CCGCCGCCANCTTC<br>NMGCCGCR-----            |              |
| MA0443.1_btd   | 6.1711e-04     | -CCGCCGCCANCTTC<br>YCCGCCMCN-----          |              |
| MA0079.2_SP1   | 7.1130e-04     | GAAGNTGGCGGCGG--<br>-----GGGGNGGGG         |              |
| MA0283.1_CHA4  | 1.7274e-03     | GAAGNTGGCGGCGG<br>-----GGCGGAGN            |              |
| MA0323.1_IXR1  | 2.0573e-03     | --CCGCCGCCANCTTC<br>CMCCGCTTCCGGYTT-       |              |
| MA0213.1_brk   | 2.1218e-03     | GAAGNTGGCGGCGG<br>-----RGCRCRS             |              |
| MA0123.1_abi4  | 4.5403e-03     | GAAGNTGGCGGCGG<br>---NGNNGCRSCG-           |              |

M33



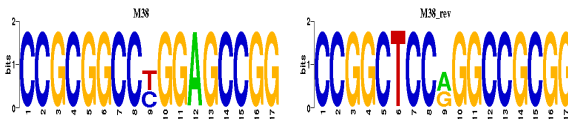
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i>  |
|---------------------|----------------|--|---|
| MA0146.1_Zfx        | 6.5678e-07     | --GGCCGAGGCCG--<br>NNNGCCNNGGCCTN          |    |
| MA0290.1_DAL81      | 1.6646e-04     | ----CGGCCTCGGCC----<br>AATCCCGCCCGCGGCTTTT |    |
| MA0065.2_PPARG_RXRA | 1.6855e-04     | ----GGCCGAGGCCG<br>NNRGGNCAAAGGKCA         |    |
| MA0320.1_IME1       | 2.3257e-04     | -GGCCGAGGCCG<br>CCGCCGAG----               |    |
| MA0344.1_NHP10      | 5.0659e-04     | CGGCCTCGGCC<br>--TCCCGGN--                 |    |
| MA0283.1_CHA4       | 1.1485e-03     | CGGCCTCGGCC<br>---NCTCCGCC                 |   |
| MA0361.1_RDS1       | 1.2203e-03     | GGCCGAGGCCG<br>----NCGGCCG                 |  |
| MA0429.1_YLL054C    | 1.4170e-03     | GGCCGAGGCCG<br>----NCGGCCG                 |  |
| MA0114.1_HNF4A      | 1.5841e-03     | --GGCCGAGGCCG<br>RGNNCAAAGKNCA             |  |
| MA0097.1_bZIP911    | 3.4793e-03     | CGGCCTCGGCC--<br>-GGCCACGTCAYC             |  |

M55



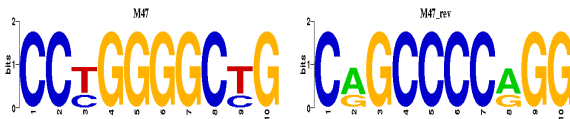
|                  | <i>forward</i> | <i>reverse compliment</i>                 |              |
|------------------|----------------|---|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                          | <i>Motif</i> |
| MA0146.1_Zfx     | 1.9690e-07     | -CGGCCTCRGCC--<br>NAGGCCNNGGCNNN          |              |
| MA0290.1_DAL81   | 2.7888e-04     | -----CGGCCTCRGCC---<br>AATCCCGCCCGCGCTTTT |              |
| MA0320.1_IME1    | 2.9694e-04     | CGGCCTCRGCC-<br>----CTCGGCGG              |              |
| MA0039.2_Klf4    | 4.6573e-04     | CGGCCTCRGCC-<br>--GCCMCRCCCN              |              |
| MA0003.1_TFAP2A  | 7.1843e-04     | CGGCCTCRGCC<br>--SCNNNNGGC                |              |
| MA0344.1_NHP10   | 8.7192e-04     | CGGCCTCRGCC<br>--TCCCCGN-                 |              |
| MA0361.1_RDS1    | 1.2203e-03     | GGCYGAGGCCG<br>----NCGGCCG                |              |
| MA0283.1_CHA4    | 1.2926e-03     | CGGCCTCRGCC<br>---NCTCCGCC                |              |
| MA0429.1_YLL054C | 1.4170e-03     | GGCYGAGGCCG<br>----NCGGCCG                |              |
| MA0150.1_NFE2L2  | 1.7619e-03     | GGCYGAGGCCG<br>TGCTNWGTCAY                |              |

M38



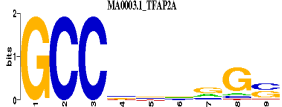



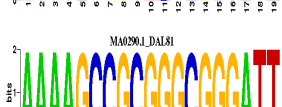
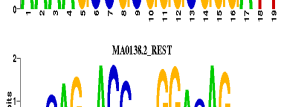




|                    | <i>forward</i> | <i>reverse compliment</i>                         |              |
|--------------------|----------------|---|--------------|
| <i>Name</i>        | <i>E value</i> | <i>Alignment</i>                                  | <i>Motif</i> |
| MA0290.1_DAL81     | 2.3626e-05     | CCGGCTCCRGGCCGCGG-----<br>---AATCCCGCCCCGCGGCTTTT |              |
| MA0003.1_TFAP2A    | 8.9937e-05     | CCGGCTCCRGGCCGCGG<br>---SCNNNNGGC-----            |              |
| MA0404.1_TBS1      | 1.0209e-04     | CCGCGGCCYGGAGCCGG<br>-----CGGNTCCG-               |              |
| MA0213.1_brk       | 1.7380e-04     | CCGGCTCCRGGCCGCGG<br>--RGCGCCRS-----              |              |
| MA0353.1_PDR3      | 2.1467e-04     | -CCGCGGCCYGGAGCCGG<br>TCCGCGGA-----               |              |
| MA0119.1_TLX1_NFIC | 2.2784e-04     | CCGCGGCCYGGAGCCGG<br>--TTGGCNNNSTGCCA-            |              |
| MA0352.1_PDR1      | 2.3774e-04     | -CCGCGGCCYGGAGCCGG<br>TCCGCGGN-----               |              |
| MA0324.1_LEU3      | 4.5540e-04     | CCGCGGCCYGGAGCCGG<br>-----CCGNMNMGG               |              |
| MA0146.1_Zfx       | 9.1524e-04     | CCGGCTCCRGGCCGCGG-----<br>-----NAGGCCNNGGCNNN     |              |
| MA0344.1_NHP10     | 1.2867e-03     | -CCGCGGCCYGGAGCCGG<br>TCCCCGN-----                |              |

**M47**

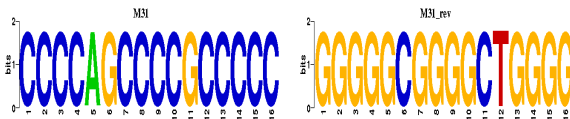


*forward*

*reverse compliment*

| Name            | E value    | Alignment                                   | Motif   |
|-----------------|------------|---|---|
| MA0003.1_TFAP2A | 6.9444e-07 | -CCTGGGGCTG<br>SCNNNNGGC--                  |    |
| MA0213.1_brk    | 5.3882e-06 | CAGCCCCAGG<br>-RGCGCCRS-                    |    |
| MA0154.1_EBF1   | 6.5976e-05 | --CCTGGGGCTG<br>TCCCTNGGGN--                |    |
| MA0138.1_REST   | 1.6360e-04 | -----CCTGGGGCTG-<br>GNGCTGTCCNWGGTGCTGA     |    |
| MA0290.1_DAL81  | 2.3090e-04 | -----CCTGGGGCTG--<br>AATCCC GCCCGGGCGGCTTTT |    |
| MA0138.2_REST   | 3.2634e-04 | -----CCTGGGGCTG--<br>GNNGCTGTCCNNGGTGCTGAN  |   |
| MA0337.1_MIG1   | 5.7453e-04 | CCTGGGGCTG<br>-SYGGGN--                     |  |
| MA0163.1_PLAG1  | 6.6921e-04 | ---CCTGGGGCTG-<br>CCCCCTTNGGCCCC            |  |
| MA0268.1_ADR1   | 9.4004e-04 | CCTGGGGCTG<br>-KTGGGN--                     |  |
| MA0332.1_MET28  | 1.1466e-03 | CAGCCCCAGG<br>---CCACAG-                    |  |

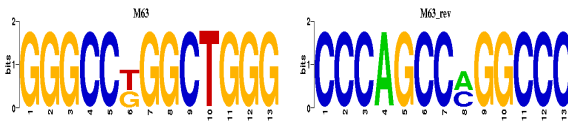
**M31**

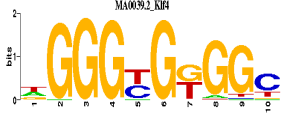

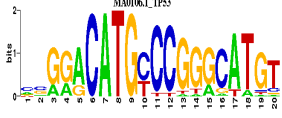


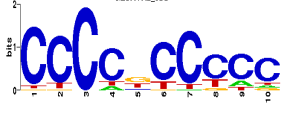
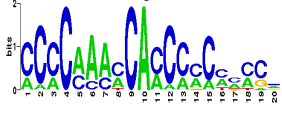







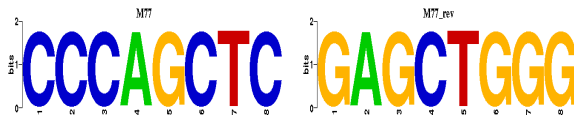
|                | <i>forward</i> | <i>reverse compliment</i>                             |              |
|----------------|----------------|---|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                                      | <i>Motif</i> |
| MA0079.2_SP1   | 1.4500e-13     | GGGGCGGGGCTGGGG<br>GGGGNGGGG-----                     |              |
| MA0039.2_Klf4  | 3.2626e-08     | CCCCAGCCCCGCCCC<br>-----GCCMCRCCCN--                  |              |
| MA0443.1_btd   | 1.1450e-07     | CCCCAGCCCCGCCCC--<br>-----YCCGCCMCN                   |              |
| MA0073.1_RREB1 | 1.2991e-06     | ---GGGGCGGGGCTGGGG-<br>NGKKKGKGGGTGKTTTGGGG           |              |
| MA0068.1_Pax4  | 1.5886e-05     | GGGGCGGGGCTGGGG-----<br>-GKRNNNNKNNNNNNNNNNKNNWWWTTTY |              |
| MA0399.1_SUT1  | 4.6061e-05     | CCCCAGCCCCGCCCC<br>-----CCCCGCG---                    |              |
| MA0338.1_MIG2  | 6.4163e-05     | GGGGCGGGGCTGGGG<br>---NGYGGGG-----                    |              |
| MA0450.1_hkb   | 7.7559e-05     | CCCCAGCCCCGCCCC<br>-----TCACGCCCM--                   |              |
| MA0373.1_RPN4  | 8.0084e-05     | CCCCAGCCCCGCCCC<br>-----CGCCACC                       |              |
| MA0339.1_MIG3  | 8.7202e-05     | GGGGCGGGGCTGGGG<br>---NGYGGGG-----                    |              |

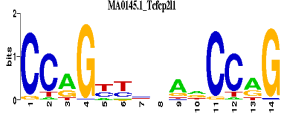



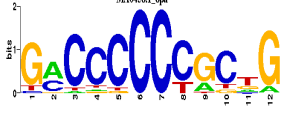
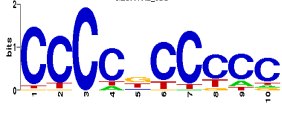




**M63**



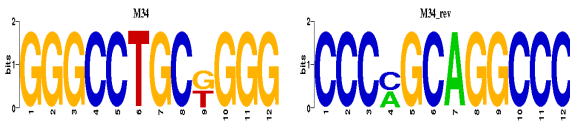
|                | <i>forward</i> | <i>reverse compliment</i>                    |   |
|----------------|----------------|--|---|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                             | <i>Motif</i>  |
| MA0039.2_Klf4  | 4.5199e-06     | CCCAGCCMGGCCC-<br>----GCCMCRCCCN             |    |
| MA0344.1_NHP10 | 1.1725e-03     | CCCAGCCMGGCCC<br>---TCCCCGGN---              |    |
| MA0106.1_TP53  | 1.6068e-03     | -----CCCAGCCMGGCCC--<br>ACATGCCCGGGCATGTCCNN |    |
| MA0267.1_ACE2  | 2.0422e-03     | GGGCKGGCTGGG<br>-----NGCTGGN                 |    |
| MA0079.1_SP1   | 3.5126e-03     | -CCCAGCCMGGCCC<br>ACCCNGCCNN----             |    |
| MA0079.2_SP1   | 4.3946e-03     | -GGGCKGGCTGGG<br>GGGGGNGGGG----              |   |
| MA0073.1_RREB1 | 6.5669e-03     | -----GGGCKGGCTGGG--<br>NGKKKGKGGGTGKTTTGGGG  |  |
| MA0450.1_hkb   | 6.8206e-03     | CCCAGCCMGGCCC-<br>-----TCACGCCCM             |  |
| MA0402.1_SWI5  | 6.8781e-03     | -CCCAGCCMGGCCC<br>NACCAGCA-----              |  |
| MA0162.1_Egr1  | 1.6418e-02     | GGGCKGGCTGGG<br>-NGCGTGGGCGK-                |  |


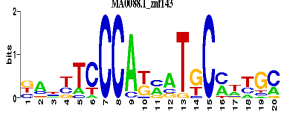

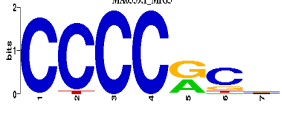
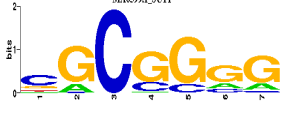




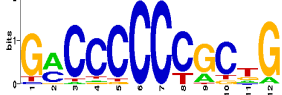
M77



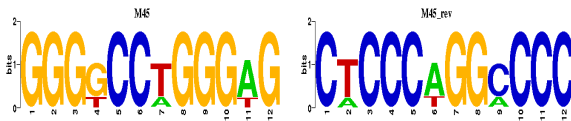
|                   | <i>forward</i> | <i>reverse compliment</i>        |   |
|-------------------|----------------|----------------------------------|---|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>                 | <i>Motif</i>  |
| MA0145.1_Tcfcp211 | 1.1433e-04     | -----GAGCTGGG<br>CYGGNTNNRNCYGG- |    |
| MA0267.1_ACE2     | 1.7345e-04     | GAGCTGGG<br>-NGCTGGN             |    |
| MA0048.1_NHLH1    | 2.6013e-04     | -CCCAGCTC---<br>NCGCAGCTGCGN     |    |
| MA0402.1_SWI5     | 4.7987e-04     | -CCCAGCTC<br>NACCAGCA-           |    |
| MA0456.1_opa      | 9.1854e-04     | GAGCTGGG----<br>CNGCGGGGGGKC     |    |
| MA0079.2_SP1      | 1.9564e-03     | --GAGCTGGG<br>GGGGGNGGGG         |   |
| MA0323.1_IXR1     | 1.9613e-03     | CCCAGCTC-----<br>CMCCGCTTCCGGYTT |  |
| MA0338.1_MIG2     | 3.2759e-03     | GAGCTGGG<br>-NGYGGGG             |  |
| MA0344.1_NHP10    | 3.3990e-03     | GAGCTGGG--<br>--NCCGGGGA         |  |
| MA0339.1_MIG3     | 4.1275e-03     | GAGCTGGG<br>-NGYGGGG             |  |

M34



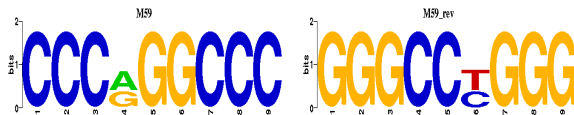
|                 | <i>forward</i> | <i>reverse compliment</i>               |   |
|-----------------|----------------|---|---|
| <i>Name</i>     | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i>  |
| MA0163.1_PLAG1  | 2.0757e-06     | -CCCMGCAGGCC-<br>CCCCCTTNGGCC           |    |
| MA0088.1_znf143 | 7.3131e-05     | ---GGCCTGCKGGG---<br>KCNNKGMANNMTGGANNN |    |
| MA0338.1_MIG2   | 1.4890e-04     | GGGCCTGCKGGG<br>-----NGYGGGG            |    |
| MA0339.1_MIG3   | 1.9878e-04     | GGGCCTGCKGGG<br>-----NGYGGGG            |    |
| MA0399.1_SUT1   | 2.1722e-04     | GGGCCTGCKGGG<br>-----CGCGGGG            |    |
| MA0337.1_MIG1   | 6.2159e-04     | GGGCCTGCKGGG-<br>-----SYGGGGN           |   |
| MA0402.1_SWI5   | 7.3994e-04     | -CCCMGCAGGCC<br>NACCAGCA-----           |  |
| MA0450.1_hkb    | 1.7075e-03     | CCCMGCAGGCC-<br>----TCACGCCM            |  |
| MA0441.1_ZMS1   | 1.8501e-03     | GGGCCTGCKGGG--<br>-----NGNGGGGNN        |  |
| MA0456.1_opa    | 2.1219e-03     | ----CCCMGCAGGCC<br>GMCCCCCGCNG----      |  |

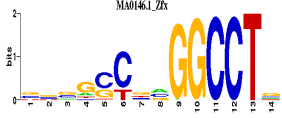

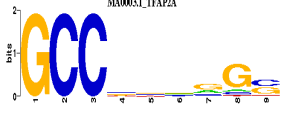


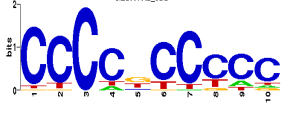



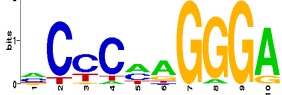
**M45**



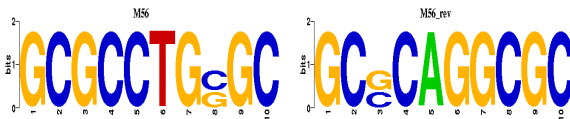
|                | <i>forward</i> | <i>reverse compliment</i>                  |              |
|----------------|----------------|--|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i> |
| MA0344.1_NHP10 | 4.7012e-06     | GGGGCCTGGGAG<br>---NCCGGGGA-               |              |
| MA0079.2_SP1   | 1.8840e-05     | GGGGCCTGGGAG<br>GGGGGNGGGG--               |              |
| MA0163.1_PLAG1 | 4.1950e-05     | -CTCCCAGGCCCC-<br>CCCCCTTNGGCCCC           |              |
| MA0450.1_hkb   | 5.3123e-05     | GGGGCCTGGGAG<br>KGGGCGTGA---               |              |
| MA0144.1_Stat3 | 1.5035e-03     | CTCCCAGGCCCC<br>CTTCCNGGAA--               |              |
| MA0162.1_Egr1  | 1.7517e-03     | -CTCCCAGGCCCC<br>MCGCCACGCN--              |              |
| MA0155.1_INSM1 | 3.0953e-03     | --CTCCCAGGCCCC<br>YGCCCCCTGRCA--           |              |
| MA0112.1_ESR1  | 5.3520e-03     | GGGGCCTGGGAG-----<br>NNGGYCANNGTGACCTNN    |              |
| MA0112.2_ESR1  | 5.8528e-03     | -----CTCCCAGGCCCC<br>NNNNNAGGTCANNNTGACCY- |              |
| MA0146.1_Zfx   | 6.1443e-03     | GGGGCCTGGGAG--<br>NAGGCCNNGGCNNN           |              |

M59



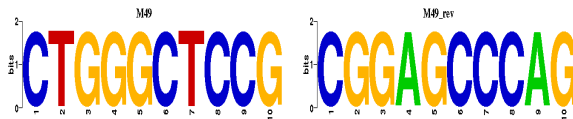
|                 | <i>forward</i> | <i>reverse compliment</i>                   |   |
|-----------------|----------------|---|---|
| <i>Name</i>     | <i>E value</i> | <i>Alignment</i>                            | <i>Motif</i>  |
| MA0146.1_Zfx    | 4.8013e-05     | -GGGCCYGGG-----<br>NAGGCCNNGGCNNN           |    |
| MA0358.1_PUT3   | 1.2606e-04     | --CCCRGGCCC<br>NNCCCGGG---                  |    |
| MA0003.1_TFAP2A | 1.3184e-04     | --CCCRGGCCC<br>SCNNNNGGC--                  |    |
| MA0344.1_NHP10  | 1.8560e-04     | -CCCRGGCCC<br>TCCCCGN--                     |    |
| MA0106.1_TP53   | 5.5294e-04     | -----CCCRGGCCC-----<br>ACATGCCCGGGCATGTCCNN |    |
| MA0079.2_SP1    | 6.1930e-04     | -GGGCCYGGG<br>GGGGGNGGGG                    |   |
| MA0450.1_hkb    | 1.3779e-03     | CCCRGGCCC-<br>-TCACGCCCM                    |  |
| MA0039.2_Klf4   | 3.0146e-03     | CCCRGGCCC-<br>GCCMCRCN                      |  |
| MA0163.1_PLAG1  | 4.1020e-03     | ----CCCRGGCCC-<br>CCCCCTTNGGCCCC            |  |
| MA0154.1_EBF1   | 5.2700e-03     | GGGCCYGGG--<br>-TCCCTNNGGN                  |  |

M56



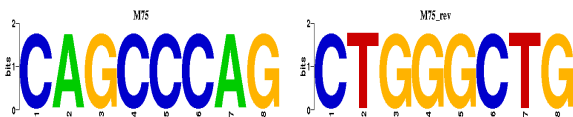
|                | <i>forward</i> | <i>reverse compliment</i>                  |              |
|----------------|----------------|--|--------------|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i> |
| MA0162.1_Egr1  | 2.9645e-04     | -GCSCAGGCGC<br>NGCGTGGGCGK                 |              |
| MA0086.1_sna   | 5.4992e-04     | GCGCCTGSGC<br>-CACCTG---                   |              |
| MA0048.1_NHLH1 | 8.4450e-04     | GCSCAGGCGC--<br>NCGCAGCTGCGN               |              |
| MA0290.1_DAL81 | 1.3121e-03     | ----GCGCCTGSGC-----<br>AATCCCGCCCGCGGCTTTT |              |
| MA0213.1_brk   | 1.5168e-03     | -GCGCCTGSGC<br>RGCGCCRS---                 |              |
| MA0344.1_NHP10 | 1.8637e-03     | GCSCAGGCGC<br>TCCCCGN--                    |              |
| MA0357.1_PHO4  | 2.6513e-03     | GCGCCTGSGC<br>SCACGTGS--                   |              |
| MA0449.1_h     | 3.4812e-03     | -GCGCCTGSGC<br>GNCACGTGNC-                 |              |
| MA0364.1_REI1  | 3.8358e-03     | GCSCAGGCGC<br>--NCAGGGG-                   |              |
| MA0146.1_Zfx   | 3.9077e-03     | -GCGCCTGSGC---<br>NAGGCCNNGGCNNN           |              |

**M49**



|                  | <i>forward</i> | <i>reverse compliment</i>         |              |
|------------------|----------------|-----------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                  | <i>Motif</i> |
| MA0404.1_TBS1    | 1.0169e-04     | CGGAGCCCAG<br>CGGNTCCG--          |              |
| MA0123.1_abi4    | 2.0037e-04     | CTGGGCTCCG<br>NGNNGCRSCG          |              |
| MA0163.1_PLAG1   | 3.2885e-04     | -----CTGGGCTCCG<br>CCCCCTTNGGCC-- |              |
| MA0311.1_HAL9    | 9.1987e-04     | CTGGGCTCCG<br>-----TTCCG          |              |
| MA0354.1_PDR8    | 2.8039e-03     | CTGGGCTCCG--<br>---ATCTCCGN       |              |
| MA0432.1_YNR063W | 2.8503e-03     | CTGGGCTCCG--<br>---ATCTCCGA       |              |
| MA0430.1_YLR278C | 2.9064e-03     | CTGGGCTCCG--<br>---AACTCCGN       |              |
| MA0368.1_RIM101  | 3.4116e-03     | CTGGGCTCCG<br>CTTGCR---           |              |
| MA0312.1_HAP1    | 4.2162e-03     | CTGGGCTCCG<br>--NAWNTCCG          |              |
| MA0263.1_ttx-3_c | 4.3614e-03     | CTGGGCTCCG----<br>ATTGGYTTMGTTAR  |              |

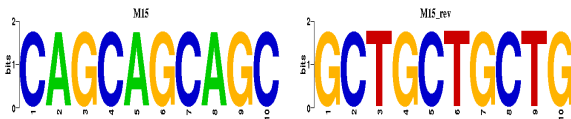
M75





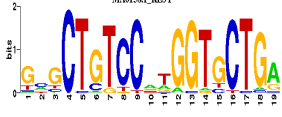

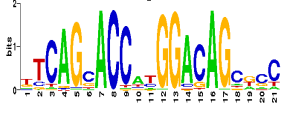
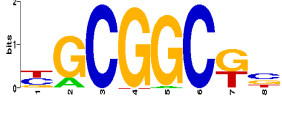

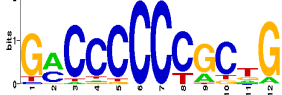




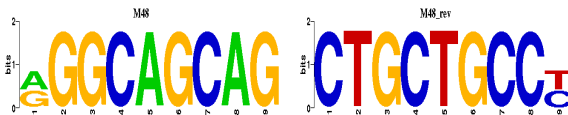
|                   | <i>forward</i> | <i>reverse compliment</i>        |              |
|-------------------|----------------|----------------------------------|--------------|
| <i>Name</i>       | <i>E value</i> | <i>Alignment</i>                 | <i>Motif</i> |
| MA0320.1_IME1     | 2.7998e-04     | CTGGGCTG<br>CTCGGCGG             |              |
| MA0368.1_RIM101   | 1.0523e-03     | CTGGGCTG<br>CTTGGCR-             |              |
| MA0162.1_Egr1     | 2.4628e-03     | CAGCCCAG---<br>MCGCCCACGCN       |              |
| MA0145.1_Tcfcp211 | 7.8645e-03     | -----CTGGGCTG-<br>CYGGNTNNRNCYGG |              |
| MA0083.1_SRF      | 9.7960e-03     | -----CTGGGCTG<br>CCATATATGGGC--  |              |
| MA0403.1_TBF1     | 1.2131e-02     | -CTGGGCTG<br>NTAGGGYT-           |              |
| MA0443.1_btd      | 1.5198e-02     | -CAGCCCAG-<br>YCCGCCCMCN         |              |
| MA0436.1_YPR022C  | 2.0287e-02     | -CTGGGCTG<br>NGTGGGG--           |              |
| MA0267.1_ACE2     | 2.0734e-02     | CTGGGCTG--<br>---NGCTGGN         |              |
| MA0412.1_UME6     | 2.2103e-02     | -----CAGCCCAG<br>AwwTAGCCGCCSA-  |              |



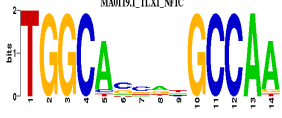




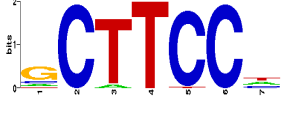


M15



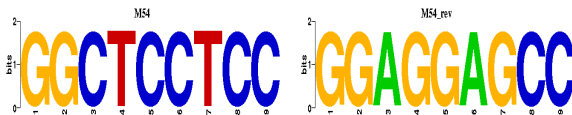
|                | <i>forward</i> | <i>reverse compliment</i>                  |   |
|----------------|----------------|--|---|
| <i>Name</i>    | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i>  |
| MA0055.1_Myf   | 2.6469e-09     | --GCTGCTGCTG<br>CAGCAGYTGCYK               |    |
| MA0454.1_odd   | 6.3761e-07     | GCTGCTGCTG--<br>-NTGCTACTGTN               |    |
| MA0048.1_NHLH1 | 2.7420e-05     | CAGCAGCAGC--<br>NCGCAGCTGCGN               |    |
| MA0402.1_SWI5  | 1.7588e-04     | GCTGCTGCTG<br>--TGCTGGTN                   |    |
| MA0138.1_REST  | 3.9371e-04     | -CAGCAGCAGC-----<br>TCAGCACCWNGGACAGCNC    |    |
| MA0287.1_CUP2  | 4.4767e-04     | CAGCAGCAGC-<br>CAGCARAAAWG                 |   |
| MA0138.2_REST  | 6.5826e-04     | -----GCTGCTGCTG--<br>GNNGCTGTCCNNGGTGCTGAN |  |
| MA0394.1_STP1  | 1.2748e-02     | CAGCAGCAGC<br>NMGCCGCR--                   |  |
| MA0111.1_Spz1  | 1.8554e-02     | GCTGCTGCTG-<br>GCTGWTACCT                  |  |
| MA0456.1_opa   | 1.9143e-02     | CAGCAGCAGC--<br>CNGCGGGGGK                 |  |

M48



|                    | <i>forward</i> | <i>reverse compliment</i>        |   |
|--------------------|----------------|----------------------------------|---|
| <i>Name</i>        | <i>E value</i> | <i>Alignment</i>                 | <i>Motif</i>  |
| MA0055.1_Myf       | 3.5883e-05     | RGGCAGCAG---<br>MRGCARCTGCTG     |    |
| MA0299.1_GAL4      | 6.9763e-04     | -----CTGCTGCCY-<br>GANNRNTNTNCCG |    |
| MA0119.1_TLX1_NFIC | 8.2926e-04     | RGGCAGCAG-----<br>TGGCASNNNGCCAA |    |
| MA0123.1_abi4      | 8.5080e-04     | --RGGCAGCAG<br>NGNNGCRSCG-       |    |
| MA0048.1_NHLH1     | 1.3271e-03     | ---CTGCTGCCY<br>NCGCAGCTGCGN     |    |
| MA0402.1_SWI5      | 1.8083e-03     | RGGCAGCAG<br>NACCAGCA-           |   |
| MA0111.1_Spz1      | 1.9824e-03     | -CTGCTGCCY-<br>GCTGWTACCCT       |  |
| MA0305.1_GCR2      | 2.2380e-03     | RGGCAGCAG<br>NGGAAGC--           |  |
| MA0287.1_CUP2      | 3.1341e-03     | RGGCAGCAG-----<br>---CAGCARAAAWG |  |
| MA0340.1_MOT3      | 3.8699e-03     | -RGGCAGCAG<br>NAGGYA-----        |  |

M54



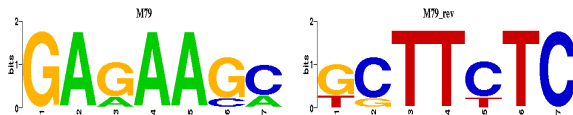
|                  | <i>forward</i> | <i>reverse compliment</i>    |              |
|------------------|----------------|------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>             | <i>Motif</i> |
| MA0283.1_CHA4    | 1.0413e-04     | GGCTCCTCC<br>-NCTCCGCC       |              |
| MA0062.1_GABPA   | 1.3055e-03     | GGCTCCTCC---<br>--SNCTTCGGT  |              |
| MA0081.1_SPIB    | 1.7388e-03     | GGAGGAGCC<br>ASMGGAA--       |              |
| MA0079.2_SP1     | 1.7804e-03     | -GGCTCCTCC<br>CCCCNCCCC      |              |
| MA0090.1_TEAD1   | 3.9260e-03     | --GGCTCCTCC-<br>YACATTCCWSNG |              |
| MA0260.1_che-1   | 5.9806e-03     | GGCTCCTCC<br>GGYTTC---       |              |
| MA0404.1_TBS1    | 6.9577e-03     | GGAGGAGCC-<br>--CGGNTCCG     |              |
| MA0105.1_NFKB1   | 7.0580e-03     | GGAGGAGCC--<br>GGGAATCCCC    |              |
| MA0130.1_ZNF354C | 8.1127e-03     | GGAGGAGCC<br>-GTGGAK--       |              |
| MA0304.1_GCR1    | 1.0279e-02     | GGAGGAGCC<br>-TGAAGCC        |              |

M83



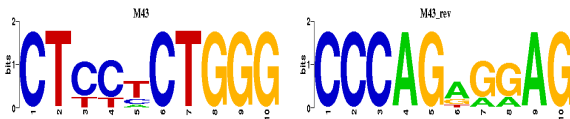
|                  | <i>forward</i> | <i>reverse compliment</i>          |              |
|------------------|----------------|------------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i> |
| MA0454.1_odd     | 2.8017e-05     | --GCTCCTG--<br>NTGCTACTGTN         |              |
| MA0086.1_sna     | 7.0763e-05     | GCTCCTG<br>-CACCTG                 |              |
| MA0156.1_FEV     | 2.3128e-04     | -GCTCCTG<br>AYTTCCTG               |              |
| MA0364.1_REI1    | 4.5307e-04     | -CAGGAGC<br>NCAGGGG-               |              |
| MA0144.1_Stat3   | 1.1672e-03     | GCTCCTG---<br>CTTCCNGGAA           |              |
| MA0323.1_IXR1    | 1.8460e-03     | ----CAGGAGC----<br>AARCCGGAAGCGGKG |              |
| MA0055.1_Myf     | 3.5536e-03     | CAGGAGC-----<br>CAGCAGYTGCYK       |              |
| MA0366.1_RGM1    | 6.3952e-03     | GCTCCTG<br>-CCCCT-                 |              |
| MA0342.1_MSN4    | 6.5951e-03     | GCTCCTG<br>-CCCCT-                 |              |
| MA0026.1_Eip74EF | 7.2912e-03     | GCTCCTG<br>YTTCCGG                 |              |




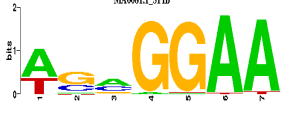






**M79**



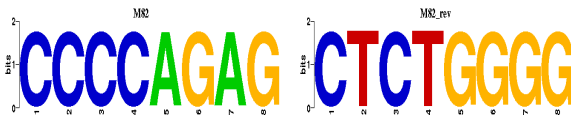
|                  | <i>forward</i> | <i>reverse compliment</i>    |              |
|------------------|----------------|------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>             | <i>Motif</i> |
| MA0305.1_GCR2    | 1.7357e-04     | GAGAAGC<br>NGGAAGC           |              |
| MA0304.1_GCR1    | 2.9174e-04     | -GCTTCTC<br>GGCTTCCA         |              |
| MA0260.1_che-1   | 5.7474e-04     | -GCTTCTC<br>GGYTTC--         |              |
| MA0289.1_DAL80   | 7.9011e-04     | GCTTCTC-<br>-CTTATCG         |              |
| MA0127.1_PEND    | 1.2376e-03     | GCTTCTC---<br>ANTTCTTATK     |              |
| MA0437.1_YPR196W | 1.6158e-03     | --GAGAAGC<br>CGGRNAAAT       |              |
| MA0053.1_MNB1A   | 1.7113e-03     | GCTTCTC<br>NCTTT--           |              |
| MA0371.1_ROX1    | 1.9612e-03     | -----GCTTCTC<br>YCNATTGTTCTC |              |
| MA0300.1_GAT1    | 2.0608e-03     | GCTTCTC--<br>-CTTATCNN       |              |
| MA0309.1_GZF3    | 3.5055e-03     | -GAGAAGC<br>NGATAASN         |              |

**M43**



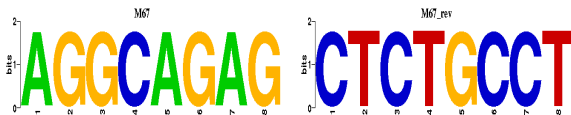
|                 | <i>forward</i> | <i>reverse compliment</i>         |   |
|-----------------|----------------|-----------------------------------|---|
| <i>Name</i>     | <i>E value</i> | <i>Alignment</i>                  | <i>Motif</i>  |
| MA0370.1_RME1   | 3.4342e-05     | CTCCTCTGGG<br>TNCCTTTNNA          |    |
| MA0154.1_EBF1   | 5.0165e-05     | CTCCTCTGGG-<br>-TCCCTNNGGN        |    |
| MA0062.1_GABPA  | 7.1522e-05     | CTCCTCTGGG<br>SNCTTCCGGT          |    |
| MA0081.1_SPIB   | 1.3499e-04     | CTCCTCTGGG<br>TTCKST---           |    |
| MA0332.1_MET28  | 8.6425e-04     | CCCAGAGGAG<br>-CCACAG---          |    |
| MA0364.1_REI1   | 1.4723e-03     | CTCCTCTGGG<br>--CCCCTGN-          |   |
| MA0163.1_PLAG1  | 2.4149e-03     | CTCCTCTGGG----<br>CCCCCTTNGGCCCC  |  |
| MA0362.1_RDS2   | 4.7118e-03     | CTCCTCTGGG<br>---NTCGGGG          |  |
| MA0116.1_Zfp423 | 5.6945e-03     | -CTCCTCTGGG----<br>GNMMCCYTRGGKSC |  |
| MA0090.1_TEAD1  | 7.3562e-03     | ----CTCCTCTGGG<br>YACATTCCWSNG--  |  |

M82


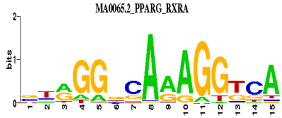



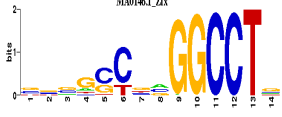
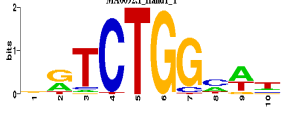





|                  | <i>forward</i> | <i>reverse compliment</i>    |              |
|------------------|----------------|------------------------------|--------------|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>             | <i>Motif</i> |
| MA0154.1_EBF1    | 1.2940e-05     | -CTCTGGGG-<br>TCCCTNGGGN     |              |
| MA0155.1_INSM1   | 7.3413e-05     | ---CCCCAGAG-<br>YGCCCCCTGRCA |              |
| MA0332.1_MET28   | 1.6557e-04     | CCCCAGAG<br>CCACAG--         |              |
| MA0268.1_ADR1    | 2.1007e-04     | CTCTGGGG-<br>--KTGGGGN       |              |
| MA0436.1_YPR022C | 2.1708e-04     | CTCTGGGG<br>-NGTGGGG         |              |
| MA0320.1_IME1    | 3.8306e-04     | CCCCAGAG<br>CCGCCGAG         |              |
| MA0337.1_MIG1    | 1.0349e-03     | CTCTGGGG-<br>--SYGGGGN       |              |
| MA0364.1_REI1    | 1.0732e-03     | CTCTGGGG<br>-NCAGGGG         |              |
| MA0362.1_RDS2    | 1.1680e-03     | CTCTGGGG<br>NTCGGGG-         |              |
| MA0341.1_MSN2    | 1.7687e-03     | CTCTGGGG<br>---AGGGG         |              |

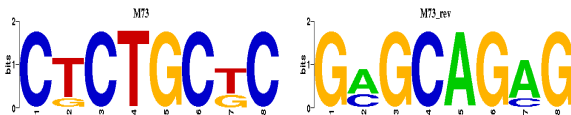
**M67**





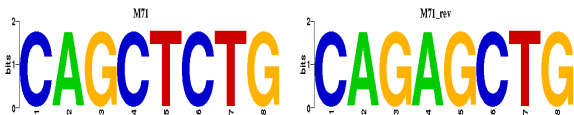
|                     | <i>forward</i> | <i>reverse compliment</i>          |   |
|---------------------|----------------|------------------------------------|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i>  |
| MA0283.1_CHA4       | 3.2748e-05     | -CTCTGCCT<br>NCTCCGCC-             |    |
| MA0065.2_PPARG_RXRA | 9.1175e-05     | ----CTCTGCCT---<br>TGMCCTTTGNCCYNN |    |
| MA0340.1_MOT3       | 2.8802e-04     | CTCTGCCT-<br>---TRCCTN             |    |
| MA0062.1_GABPA      | 3.6977e-04     | CTCTGCCT--<br>SNCTTCCGGT           |    |
| MA0080.2_SPI1       | 1.2216e-03     | CTCTGCCT<br>-ACTTCCT               |    |
| MA0146.1_Zfx        | 5.7650e-03     | -AGGCAGAG-----<br>NAGGCCNNGGCNNN   |   |
| MA0092.1_Hand1_T    | 5.7975e-03     | -AGGCAGAG-<br>NWNCCAGAYN           |  |
| MA0417.1_YAP5       | 7.2481e-03     | AGGCAGAG<br>AAGCAT--               |  |
| MA0320.1_IME1       | 7.6948e-03     | CTCTGCCT<br>CTCGGCGG               |  |
| MA0114.1_HNF4A      | 8.3953e-03     | -AGGCAGAG-----<br>RGNNCAAAGKNCA    |  |

**M73**





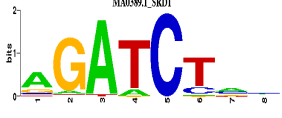
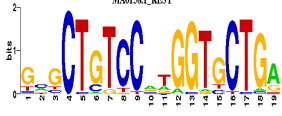


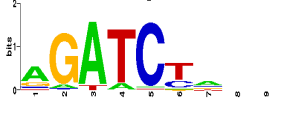
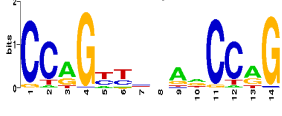

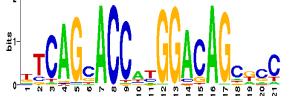
|                     | <i>forward</i> | <i>reverse compliment</i>          |              |
|---------------------|----------------|------------------------------------|--------------|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                   | <i>Motif</i> |
| MA0326.1_MAC1       | 7.3978e-05     | -GAGCAGAG<br>YGAGCAA-              |              |
| MA0065.2_PPARG_RXRA | 1.0019e-03     | ----CTCTGCTC---<br>TGMCCTTTGNCCYNN |              |
| MA0287.1_CUP2       | 1.7068e-03     | GAGCAGAG---<br>CAGCARAAWG          |              |
| MA0320.1_IME1       | 6.0827e-03     | CTCTGCTC<br>CTCGGCGG               |              |
| MA0283.1_CHA4       | 7.1247e-03     | GAGCAGAG-<br>-GGCGGAGN             |              |
| MA0451.1_kni        | 2.7598e-02     | CTCTGCTC-----<br>--NTGCTCTANTTT    |              |
| MA0332.1_MET28      | 2.8779e-02     | GAGCAGAG<br>--CCACAG               |              |
| MA0048.1_NHLH1      | 3.0154e-02     | GAGCAGAG----<br>NCGCAGCTGCGN       |              |
| MA0062.1_GABPA      | 3.4544e-02     | CTCTGCTC--<br>SNCTTCCGGT           |              |
| MA0150.1_NFE2L2     | 3.9258e-02     | ----CTCTGCTC<br>RTGACWNAGCA-       |              |

M71

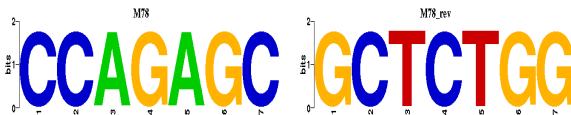




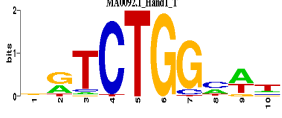

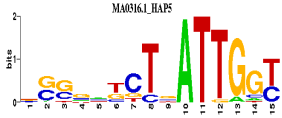




*forward*

*reverse compliment*

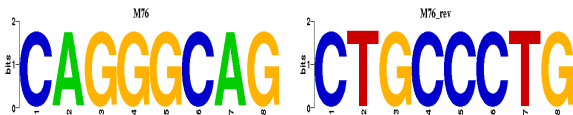
| Name              | E value    | Alignment                               | Motif   |
|-------------------|------------|---|---|
| MA0048.1_NHLH1    | 2.1002e-03 | ---CAGCTCTG-<br>NCGCAGCTGCGN            |    |
| MA0335.1_MET4     | 4.2054e-03 | -CAGAGCTG<br>CCACAGNT-                  |    |
| MA0389.1_SRD1     | 4.2283e-03 | CAGCTCTG-<br>-AGATCTNN                  |    |
| MA0138.1_REST     | 9.6193e-03 | -----CAGCTCTG<br>TCAGCACCWNGGACAGCNC--  |    |
| MA0121.1_ARR10    | 9.7395e-03 | -CAGCTCTG<br>NMRNATCT-                  |    |
| MA0451.1_kni      | 1.1380e-02 | ----CAGAGCTG<br>AAANTAGAGCAN            |   |
| MA0301.1_GAT3     | 1.1796e-02 | --CAGAGCTG<br>NNNAGATCT-                |  |
| MA0145.1_Tcfcp2l1 | 1.2175e-02 | ----CAGAGCTG-<br>CYGGNTNNRNCYGG         |  |
| MA0354.1_PDR8     | 1.3031e-02 | CAGCTCTG-<br>-ATCTCCGN                  |  |
| MA0138.2_REST     | 1.3118e-02 | CAGAGCTG-----<br>-GNNGCTGTCCNNGGTGCTGAN |  |


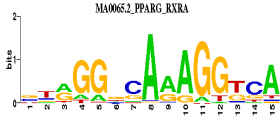
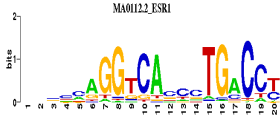


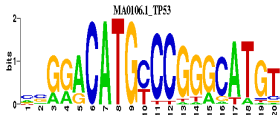




**M78**



|                  | <i>forward</i> | <i>reverse compliment</i>                  |   |
|------------------|----------------|--|---|
| <i>Name</i>      | <i>E value</i> | <i>Alignment</i>                           | <i>Motif</i>  |
| MA0451.1_kni     | 4.4000e-05     | ---CCAGAGC--<br>AAANTAGAGCAN               |    |
| MA0332.1_MET28   | 6.7873e-05     | CCAGAGC<br>CCACAG--                        |    |
| MA0092.1_Hand1_T | 6.8999e-04     | ---CCAGAGC<br>NWNCCAGAYN                   |    |
| MA0278.1_BAS1    | 1.0161e-03     | -----CCAGAGC-----<br>NNNNRGCCNGAGTCARNWNNN |   |
| MA0335.1_MET4    | 1.2475e-03     | CCAGAGC-<br>CCACAGNT                       |    |
| MA0316.1_HAP5    | 4.6629e-03     | -----CCAGAGC---<br>ACCAATNAGMNNSSN         |   |
| MA0053.1_MNB1A   | 8.5601e-03     | GCTCTGG<br>NCTTT--                         |  |
| MA0276.1_ASH1    | 9.0254e-03     | ---GCTCTGG<br>CCYGATNYGG                   |  |
| MA0002.2_RUNX1   | 9.0368e-03     | ---CCAGAGC-<br>NAACCACARNN                 |  |
| MA0370.1_RME1    | 9.6322e-03     | --GCTCTGG-<br>TNCCTTTNNA                   |  |

M76



|                     | <i>forward</i> | <i>reverse compliment</i>               |   |
|---------------------|----------------|---|---|
| <i>Name</i>         | <i>E value</i> | <i>Alignment</i>                        | <i>Motif</i>  |
| MA0364.1_REI1       | 1.6870e-04     | -CAGGGCAG<br>NCAGGGG--                  |    |
| MA0065.2_PPARG_RXRA | 6.8216e-04     | -----CTGCCCTG-<br>TGMCCTTTGNCCYNN       |    |
| MA0112.2_ESR1       | 1.5073e-03     | CAGGGCAG-----<br>-RGGTCANNNTGACCTNNNNN  |    |
| MA0366.1_RGM1       | 1.7687e-03     | CAGGGCAG<br>-AGGGG--                    |    |
| MA0342.1_MSN4       | 1.9583e-03     | CTGCCCTG<br>--CCCCT-                    |    |
| MA0106.1_TP53       | 3.0795e-03     | --CTGCCCTG-----<br>ACATGCCCGGGCATGTCCNN |   |
| MA0341.1_MSN2       | 3.6912e-03     | CAGGGCAG<br>-AGGGG--                    |  |
| MA0451.1_kni        | 4.4912e-03     | CTGCCCTG----<br>NTGCTCTANNTT            |  |
| MA0123.1_abi4       | 4.7090e-03     | CAGGGCAG--<br>NGNNGCRSCG                |  |
| MA0086.1_sna        | 6.4886e-03     | CTGCCCTG<br>--CACCTG                    |  |

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