

CLUSTAL O(1.2.4) multiple sequence alignment: E4P

Human	CACCTGTGGTCTAGTATTATTAGGAGGCTGAGGGAGAAGAATCACTGGAGGCTAGGATTT	60
Rhesus	CACCTGTGGTCTAGTATTATTAGGAGGCTGAGGGAGAGGAATCACTG----GAAGGATTT	56
Patas	CACCTGTGGTCTAGTATTATTAGGAGGCTGAGGGAGAGGAATCACTGGAGCCCAGGATTT	60
AGM	CACCTGTGGTCTAGTATTATTAGGAGGCTGAGGGAGAGGAATCACTGGAGCCCAGGATTT	60
	*****	
Human	CCAGGCTGTAGTGAGCCATGATTGTGCTATTCTCACTCCAGCTTGGGTGACAGGGTGAGAT	120
Rhesus	CCAGGCTGTAGTGAGCCATGATTGTGCTATTCTCACTCCAGAGTGGGTGACAGGGTGAGAT	116
Patas	CCAGGCTGTAGTGAGCCATGATTGTGCTATTCTCACTCCAGAGTGGGTGACAGGGTGAGAT	120
AGM	CCAGGCTGTAGTGAGCCATGATTGTGCTATTCTCACTCCAGAGTGGGTGACAGGGTGAGAT	120
	*****	
Human	CCTGTCTCTAAAAAGAATAATAACAATAATAATAACATTATCTCACACAACGAGGAATC	180
Rhesus	CCTGTCTCTAAAAATAATAATAACGATCACAATACACACTATCTCACACAATGAGGAACT	176
Patas	CCTGTCTCTAAAAATAATAATAACGATCACAATACACACTATCTCACACAATGAGGAACT	180
AGM	CCTGTCTCTAAAAATAATAATAACGATCACAATACACACTATCTCACACAATGAGGAACT	180
	*****	
	<b>RUNX3</b>	
Human	CAGGAGCAGTCTTGCTGAGTAGTTCTGGCACAGGGTGC <b>TCATGAGGTGCT</b> GCAGGT	240
Rhesus	CAGGAGCAGTCTTGCTGAGTAGTTCTGGCACAGGGTGC <b>TCATGAGGTGCT</b> GCAGGT	236
Patas	CAGGAGCAGTCTTGCTGAGTAGTTCTGGCACAGGGTGC <b>TCATGAGGTGCT</b> GCAGGT	240
AGM	CAGGAGCAGTCTTGCTGAGTAGTTCTGGCACAGGGTGC <b>TCATGAGGTGCT</b> GCAGGT	240
	*****	
Human	GAGGGTCAGGCTGGAGCCATCTGAAGGCTGGGATGGGGCTGGAGATTCTGCCTCCAAGA	300
Rhesus	GTGGGCCAGGCCAGGAGCCATCTGAAGGCTGGGATGGGGCTGGAGATTCTGCCTCCAAGA	296
Patas	GTGGGCCAGGCCAGGAGCCATCTGAAGGCTGGGATGGGGCTGGAGATTCTGCCTCCAAGA	300
AGM	GTGGGCCAGGCCAGGAGCCATCTGAAGGCTGGGATGGGGCTGGAGATTCTGCCTCCAAGA	300
	*****	
Human	CAGCT <b>CCCT</b> TGGGAGGCTGTGGCCAGAGGCCCTTA <b>ACTCC</b> CCTGT-GTGGGTGCTCTTT	359
Rhesus	CAGCT <b>CCCT</b> TGGGAGGCTGTGGCCAGAGGCCCTTAGCGCC <b>TCC</b> CTGCGTTGGGCGTCTTT	356
Patas	CAGCT <b>CCCT</b> TGGGAGGCTGTGGCCAGAGGCCCTTAGCAC <b>CTCC</b> CTGC-TTGGGCGTCTTT	359
AGM	CAGCT <b>CCCT</b> TGGGAGGCTGTGGCCAGAGGCCCTTAGCAC <b>CTCC</b> CTGC-TTGGGCGTCTTT	359
	*****	
Human	ATGGGGCCCTCTCACAAACAC <b>G</b> ACACAGCAACTGGCT <b>TCCC</b> CAGAGGGACAGCGTGGAAAA	419
Rhesus	ATGGGGCCCTCTCACAAACAT <b>G</b> ACACAGCAACTGGCT <b>TCCC</b> CAGAGGGACAGCGTGGACAA	416
Patas	ATGGGGCCCTCTCACAAACAC <b>G</b> ACACAGCAACTGGCT <b>TCCC</b> CAGAGGGACAGCGTGGACAA	419
AGM	ATGGGGCCCTCTCACAAACAC <b>G</b> ACACAGCAACTGGCT <b>TCCC</b> CAGAGGGACAGCGTGGACAA	419
	*****	
	<b>LEF1/TCF</b>	
Human	GACAAAAGCTACCACATCTTTATTTCAAGA <b>TG</b> AGATT <b>GA</b> TCTTGAAAACACGTGCCAT	479
Rhesus	GACAAAAGCTACCATGTCTT----- <b>TTG</b> ATCTGGAAAACAACATACCAT	460
Patas	GACAAAAGCTACCATGTCTTTATTTCAAGA <b>TG</b> AATT <b>GA</b> TCTGAAAACAACATACCAT	479
AGM	GACAAAAGCTACCATGTCTTTATTTCAAGA <b>TG</b> AATT <b>GA</b> TCTTGAAAACAACATACCAT	479
	*****	
Human	AATTTCTGCCCTATTCTATTGATCAGAGACCA <b>ACTGG</b> TGCAAGCAGGAGGGGGCAAT	539
Rhesus	GATTTCTGCCCTATTCTATTGGTCAAGAGACCA <b>ACTGG</b> TGCAAGCAGGAGGGGGCAAT	520
Patas	GATTTCTGCCCTATTCTATTGGTCAAGAGACCA <b>ACTGG</b> TGCAAGCAGGAGGGGGCAAT	539
AGM	GATTTCTGCCCTATTCTATTGGTCAAGAGACCA <b>ACTGG</b> TGCAAGCAGGAGGGGGCAAT	539
	*****	
Human	GCAAGGGTGTGA <b>ACTG</b> AGGGAGACAGGAGTCACTGGGGCCATCTTG <b>CAG</b> CCTGGCTGTC	599
Rhesus	GCAAGGGTGTGA <b>ACG</b> GAGGGAGACAGGAGTCACTGGGGCCATCTTG <b>CAG</b> CCTGGCTGTC	580
Patas	GCAAGGGTGTGA <b>ACG</b> GAGGGAGACAGGAGTCACTGGGGCCATCTTG <b>CAG</b> CCTGGCTGTC	599
AGM	GCAAGGGTGTGA <b>ACG</b> GAGGGAGACAGGAGTCACTGGGGCCATCTTG <b>CAG</b> CCTGGCTGTC	599
	*****	
Human	AGAGTGG <b>G</b> GAGCAGTCCCTGA <b>AA</b> CAGAGATAGGCCAAGAGACGGGAAGGGACGCTCT <b>G</b> A	659
Rhesus	AGAGTGG <b>G</b> GAGCAGTCCCTGA <b>AA</b> CAGGGATAGGCCAAGAGAGGAGAGGGACCCCT <b>G</b> A	640
Patas	AGAGTGG <b>G</b> GAGCAGTCCCTGA <b>AA</b> CAGGGATAGGCCAAGAGAGGAGAGGGACCCCT <b>G</b> A	659
AGM	AGAGTGG <b>G</b> GAGCAGTCCCTGA <b>AA</b> CAGGGATAGGCCAAGAGAGGAGAGGGACCCCT <b>G</b> A	659
	*****	
Human	GCATCTCCATCCCCAGCCCTCTCTCTTGTCCACTCTC <b>G</b> AGAAGTCTGGAAAGCCAAAGTG	719
Rhesus	GCATCTCCATCCCCAGCTGTCTCTCTTGTCCACTCTC <b>G</b> AGAAGTCTGGAAAGCCAAAGTG	700
Patas	GCATCTCCATCCCCAGCCATCTCTCTTGTCCACTCTC <b>G</b> AGAAGTCTGGAAAGCCAAAGTG	719
AGM	GCATCTCCATCCCCAGCCATCTCTCTTGTCCACTCTC <b>G</b> AGAAGTCTGGAAAGCCAAAGTG	719
	*****	
Human	AGGTCCAGGGCCTTG <b>G</b> CAAGTCGAGTGTGTGAGGTAGGAGGCCATACTGTGCACATT <b>C</b> AG	779
Rhesus	AGGTCTAGGGCCCTTG <b>G</b> CAAGTCGAGTGTGTGAGGTAGAAGGCC <b>T</b> ACTGTGCACACT <b>C</b> AG	760
Patas	AGGTCTAGGGCCCTTG <b>G</b> CAAGTCGAGTGTGTGAGGTAGGAGGCC <b>T</b> ACTGTGCACACT <b>C</b> AG	779
AGM	AGGTCTAGGGCCCTTG <b>G</b> CAAGTCGAGTGTGTGAGGTAGGAGGCC <b>T</b> ACTGTGCACACT <b>C</b> AG	779

\*\*\*\*\*

Human CCTTGGAGTCGGGTTTGCCAGCGGTTCGCCCTACCCCTGACGTGGTCTTCTCAGCTCCATA 839  
Rhesus CCCTGGAGTCGGGTTTGCCAGCTGTTCGCCCTACCCGTGACCTGGTCTTCTCAGCTCCATA 820  
Patas CCTTGGAGTCGGGTTTGCCAGCCGTTCGCCCTACCCGTGACCTGGTCTTCTCAGCTCCATA 839  
AGM CCCTGGAGTCGGGTTTGCCAGCCGTTCGCCCTACCCGTGACCTGGTCTTCTCAGCTCCATA 839  
\* \* \* \* \*

Human GTGCAGAGGAGGACCTCTGCAGGCCAGAAATTTCCCTGCCACCTCCCTACCAGGTA 899  
Rhesus GCGCAGAGGAGGACCTCTGCAGGCCAGAAATGTCTTGCCACCTCCCTACCTGGTA 880  
Patas GCGCAGAGGAGGACCTCTGCAGGCCAGAAATGTCTTGCCACCTCCCTGCCTGGTA 899  
AGM GCGCAGAGGAGGACCTCTGCAGGCCAGAAATGTCTTGCCACCTCCCTGCCTGGTA 899  
\* \* \* \* \*

**LEF1/TCF**

Human GAGATGTTAGGTTTACAGCCCTGAGCCCTGCTGCTATCCCTCCTTCAAAGGAGGATCA 959  
Rhesus GAGATGTTAGGTTTACAGCCCTGAGCCCTGCTGCTATCCCTCCTTCAAAGGAGGATCA 940  
Patas GAGATGTTAGGTTTACAGCCCTGAGCCCTGCTGCTATCCCTCCTTCAAAGGAGGATCA 959  
AGM GAGATGTTAGGTTTACAGCCCTGAGCCCTGCTGCTATCCCTCCTTCAAAGGAGGATCA 959  
\* \* \* \* \*

**LEF1/TCF**

Human AGGAGCTTAGGATCCCTGCACAGGCCACCCAGGGTGGGGTTCTTCCTTTGAAGGGAA 1019  
Rhesus AGGAGCTTAGGATCCCTGCACAGGCCACCCAGGGTGGGGTTCTTCCTTTGAAGGGAG 1000  
Patas AGGAGCTTAGGATCCCTGCACAGGCCACCCAGGGTGGGGTTCTTCCTTTGAAGGGAA 1019  
AGM AGGAGCTTAGGATCCCTGCACAGGCCACCCAGGGTGGGGTTCTTCCTTTGAAGGGAA 1019  
\* \* \* \* \*

**RUNX1**

Human TTGCTTTGGGGTGGGGTTCGGTTCTATCTGCTCCACTCTGTGGCTGACAGTTTCTCCAAGG 1079  
Rhesus TGGGTTTGGGGTAGGGTTCGGTTCTATCTGTTCTACTCTGTGGCTGACAGTTTCTCCAAGG 1060  
Patas TGGGTTTGGGGTAGGGTTCGGTTCTATCTGTTCTACTCTGTGGCTGACAGTTTCTCCAAGG 1079  
AGM TGGGTTTGGGGTAGGGTTCGGTTCTATCTGTTCTACTCTGTGGCTGACAGTTTCTCCAAGG 1079  
\* \* \* \* \*

**ZEB**

Human GGCTGCAGGTGTACAGTGTCTGAGCCGGGCTGAGCTCTGAAACGTGCCTACTCAAACCT 1139  
Rhesus GGCTGCAGGTGTACAGTGTCTGAGGCCAGCCTGAGCTCTGAAATGTGCCTACTCAAACCT 1120  
Patas GGCTGCAGGTGTACAGTGTCTGAGCCAGCCGAGCTCTGAAATGTGCCTACTCAAACCT 1139  
AGM GGCTGCAGGTGTACAGTGTCTGAGCCAGCCTGAGCTCTGAAATGTGCCTACTCAAACCT 1139  
\* \* \* \* \*

Human CCCGTGGGGTAGGGGAGGCCAGAACCCCTCTGAGAGTGGCAAAAAGTGGTCCCTGGAG 1199  
Rhesus CCA-TGGGGTAGGGGAGGCCAGAACCCCTCTGAGAGTGGCAACAAGTGGTCCCTGCAG 1179  
Patas CCCGTGGGGTAGGGGAGGCCAGAACCCCTCTGAGAGTGGCAACAAGTGGTCCCTGCAG 1199  
AGM CCCGTGGGGTAGGGGAGGCCAGAACCCCTCTGAGAGTGGCAACAAGTGGTCCCTGCAG 1199  
\* \* \* \* \*

Human CCAGGGGAAATGTGGATGGGGTAGA-1224  
Rhesus CCAGGGGAAATGTGGATGGGGTAGAC1205  
Patas CCAGGGGAAATGTGGATGGGGTAGAC1225  
AGM CCAGGGGAAATGTGGATGGGGTAGAC1225  
\* \* \* \* \*

CLUSTAL O(1.2.4) multiple sequence alignment: TSS

```

                                     ELF/ETS
Patas      ---GGGGCCGGCCAGGCCTAGGGTGTGGAGGAACCTCGCCATCGGGCTTCCTGTCTCT 56
AGM        ---GGGGCCGGCCAGGCCTAGGGTATGGAGGAGCCTCGCCATCGGGCTTCCTGTCTCT 56
Rhesus     ---GGGGCCGGCCAGGCCTAGGGTGTGGAGGAGCCTCGCCATCGGGCTTCCTGTCTCT 56
Human      GTTTGGGGCCGGCCAGGCCTAGGGTGTGGAGGAGCCTTGCCATCGGGCTTCCTGTCTCT 60
          *****
                                     TCF-1
Patas      CTTCAATTAAGCACGACTCTGCAGAAGGAACAAAGCACCCCTCCCCACTGGGCTCCTGGTT 116
AGM        CTTCAATTAAGCACGACTCTGCAGAAGGAACAAAGCACCCCTCCCCACTGGGCTCCTGGTT 116
Rhesus     CTTCAATTAAGCACGACTCTGCAGAAGGAACAAAGCACCCCTCCCCACTGGGCTCCTGGTT 116
Human      CTTCAATTAAGCACGACTCTGCAGAAGGAACAAAGCACCCCTCCCCACTGGGCTCCTGGTT 120
          *****

Patas      GCAAAGCTCCAAGTCCTCACACAGATACACTTGT 150
AGM        GCAAAGCTCCAAGTCCTCACACAGATACACTTGT 150
Rhesus     GCAAAGCTCCAAGTCCTCATAACAGATACACTTGT 150
Human      GCAGAGCTCCAAGTCCTCACACAGATACGC---- 150
          *** ***** *
```

CLUSTAL O(1.2.4) multiple sequence alignment: S4

Human	CGGTTCCCCCGATGTGGGTGTCTGAGGCGAAGAAGAGGATGGCGGAGGTTGCAGCC <b>CCA</b>	60
Rhesus	CGGTTCCCCCGATGTGGGTGTCTGAGGCGAAGAAGAGGATGGCGGAGGTTGCAGCC <b>CCA</b>	60
Patas	CGGTTCCCCCGATGTGGGTGTCTGAGGCGAAGAAGAGGATGGCGGAGGTTGCAGCC <b>CCA</b>	60
AGM	CGGTTCCCCCGATGTGGGTGTCTGAGGCGAAGAAGAGGATGGCGGAGGTTGCAGCC <b>CCA</b>	60
	*****	
	<b>RUNX3</b>	
Human	<b>ACCACAAGAG</b> TTCCTTAGAGGGGTCACAGTCTCTAGGAAGTTT <b>A</b> TAGGAAGCTAGTCAGC	120
Rhesus	<b>ACCACAAGAG</b> TTCCTTAGAGGGGTCACAGTCTCTAGGAAGTTT <b>A</b> TAGGAAGCCAGTCAGC	120
Patas	<b>ACCACAAGAG</b> TTCCTTAGAGGGGTCACAGTCTCTAGGAAGTTT <b>C</b> TAGGAAGCCAGTCAGC	120
AGM	<b>ACCACAAGAG</b> TTCCTTAGAGGGGTCACAGTCTCTAGGAAGTTT <b>C</b> TAGGAAGCCAGTCAGC	120
	*****	
Human	AGTAGAGAGGGTGAACGCGGTGGGGCACATCCCGCGGCTGGGCT <b>T</b> GAGTGGGCTGCTTGG	180
Rhesus	AGTAGAGAGGGTGAACGCGGTGGGGCACATCCCGCGGCTGGGCT <b>T</b> GAGTGGGCTGCTTGG	180
Patas	AGTAGAGAGGGTGAACGCGGTGGGGCACATCCCGCGGCTGGGCT <b>C</b> GAGTGGGCTGCTTGG	180
AGM	AGTAGAGAGTGTGAACGCGGTGGGGCACATCCCGCGGCTGGGCT <b>C</b> GAGTGGGCTGCTTGG	180
	*****	
	<b>LEF1</b>	
Human	GGGTTATGGGG <b>GAAGATAAAAGTGCC</b> TGTGGGACCACAGACTCTCGCTGTGGTGGAGCT	240
Rhesus	GGGTTATGGGAG <b>GAAGATAAAAGTGCC</b> TGTGGGACCACAGACTCTTGCTGTGGTGGAGCT	240
Patas	GGGTTATGGGAG <b>GAAGATAAAAGTGCC</b> TGTGGGACCACAGACTCTCGCTGTGGTGGAGCT	240
AGM	GGGTTATGGGAG <b>GAAGATAAAAGTGCC</b> TGTGGGACCACAGACTCTCGCTGTGGTGGAGCT	240
	*****	
Human	GGGCCCTCTTACCCTCCCAAGCCTCGCCCTC <b>A</b> TCCCATCCCTGGGGGCCAGGGGTGAGG	300
Rhesus	GGGCCCTCTTACCCTCCCAAGCCTCGCTCCTC <b>A</b> TCCCATCCCTGGGGGCCAGGGGTGAGG	300
Patas	GGGCCCTCTTACCCTCCCAAGCCTCGCTCCTC <b>G</b> TCCCATCCCTGGGGGCCAGAGGTGAGG	300
AGM	GGGCCCTCTTACCCTCCCAAGCCTCACTCCTC <b>G</b> TCCCATCCCTGGGGGCCAGGGGTGAGG	300
	*****	
	<b>RUNX3</b>	
Human	GCGGCAG <b>GGAACCTCAAGG</b> CTCTGAGAAAGTGCGTGGTGTGTGTTGCCATTTTGGTCTCTT	360
Rhesus	GCGGCAG <b>GGAACCTCAAGG</b> CTCTGAGAGAGTGCGTGGTGTGTGTTGCCATTTTGGTCTCAT	360
Patas	GCGGCAG <b>GGAACCTCAAGG</b> CTCTGAGAGAGTGCGTGGTGTGTGTTGCCATTTTGGTCTCAT	360
AGM	GCGGCAG <b>GGAACCTCAAGG</b> CTCTGAGAGAGTGCGTGGTGTGTGTTGCCATTTTGGTCTCAT	360
	*****	
Human	CTCTTTCTCAGTCTCTCTTTGCCTCACTTTGGATCT <b>A</b> TGCTCTGTGCATCTGTCTT-	416
Rhesus	CTCTTTCTCAGTCTCTCTTTGCCTCACTTTGGATCT <b>A</b> TGCTCTGTGCATCTGTCTTG	417
Patas	CTCTTTCTCAGTCTCTCTTTGCCTCACTTTGGATCT <b>G</b> TGCTCTGTGCATCTGTCTTG	417
AGM	CTCTTTCTCAGTCTCTCTTTGCCTCACTTTGGATCT <b>G</b> TGCTCTGTGCATCTGTCTTG	417
	*****	

