

-- Input sequences -----

>DCT 1500KB upstream region

TTACATGTAATCAGGAGGACAATCAAAGCAAGGGAAGGGAAAATGAAAATCTCAAACAATTAATTTAAAACAA
ACTAACATAACTGAAAAGAATACCCACATATGTACACTCTAACAGTAACAACCTATAGTTATAGTACAGAACTT
TATAAACCTTCTAGAGAATTTTGAAGGTAAATCGGAAAAGAGGAGAACGTTCTTCTGATCATTTGCCCAAGGC
AATTGGATCAAAGATTAAGAAGGCAAGAGAGCAATCACTGAAAATAAGTTTGGCCCAAATATGTAAACAAGC
ATGAGGTTTTAGAGAAGCTGGTCTGGTTCCCGGTGACTAATGAATTGGAAGACCTCTTAGGAACCTGGACC
ACGACTCATAGATGGTCTGCTTCTAGAAGGCTTGAATCTTTATAATTACCAGTCTGTGAGCCATCTAACAGG
TGGTTGATCATCTTTGCTTTAAAAGTATTTATTTTATAGTAGTAGGTATACAGTTACCATCTTAGATGCTAG
GCAAACACAGAATTGTATTAATAAACTGATGAGCCTGGTCAGTAAAATTTCTTATTTGCTCTCTCTAAACAAC
AGAAAACGTTCCCTCCCAAATATTTAAAATTTGCTGAATGTGGATGCTCTTAGTCTTCCAGTGATAAGTACAAT
CTGCAAGCCTCTAAGTGAAGATCACTTTCTTTGTTGGGACATGACTGATGATGAACCGTTCCTCTTTACATCA
CTGTATGAGACACATCATAAAAATGGAGATTCATTTTAAACACTGTAAGAGTCTTGGTATCATAGCTAGAAA
ACAGGTGGCAGAAAATGTCATTTGAATATAACCTGAATGTAGATATCAGCTCACTATGAAGGCTACAACATGG
TAATGTGTATTGTCTTCTGCCATGTGGTAGCTCGTGATCCTTTAAAGTTTTTCAGAGTGAATTACAATATTCAA
CTATAGTTGCTGTGGAGGTCCATAATTTTGCAATCTCTTACAAAGCTCTCAAAGAACTTGCACCCCTCAGCC
C
ACAGCATGAAGTCTGAGGTCGTGGTCTCATAAAGCACTGAGCAGAAGAAAAGATAAAGCAATGGGAATCAAAG
ACGTTTTGTCTCCCTCGTCCAGGGCTTCTCCCCCAGCATTCATGGGTTTCTTTTTGCTTGTAATGTATGTG
CTAATCATAAGGGTTTTCAAAAAGCTAATCCTTCTAATTAGGGTTTACTGACCCCCAAATATAAAATCTCCAG
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ATTAAGCAAAGACCCCTGAAGGTTAACCTAGTTGCAGTGAGGAGGAAAATTTGCTTCTCGGTGAGTTCGAAT
GGGGCTTGCTCATCCAGCTGGAGATGGCTAATGATAATCTTTTCACTGTATCTTGCATTTAGAACCACAGGCT
GAGCAGCAGAGTTTTGGAAGCTCTGGGAATTAGATCTTG

>TYR 1500KB upstream region

ATTGACTTCACTGTGCATCATGTTTTCTGCTAGAAAATCCCAGGTTCCCCCAAGTAAAATTTGAATAGACTGG
ATAATGGCTTTCTATTGTATTTCCATCAGAACGTCCATGCTAAAAAATGAAACCAGTCTCTACAAGTTCCAT
ACTGTCCTGCCAACTGCCTATTCTTGTGTAAGAGCCAGCCTTGGACATCCCAAATTTCTGAATGGAGCTGC
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GTAATCTCAAATTTCTTTCCATAGCATTGTAAGAAAACAATATATGCACATTTTGTATACATATGGAACGCTATA
GAACTTTTTCTTATTTCCATAGTTTTTCCAGATTTCTGGTTTGCCTAGAGGTTTAAAGATGGTCTGCATGGTCAAAC
TGATTTTGTGTCAGTTTTAATCTTCCAGTGTGTTTGTCTTGTGATATACAGTATTTGTGTCTGATTGCTGCAC
TGCATTTCCAACGTGCTGTAAGTCAATCGAAAGCACTACGGCTGGAAGACAGACTGTCCCTTGAGATGTCAGTT
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G
TTGGTTCCACTGCTGGACTATTCCTACCCTAGATGTCTTTCCTAACATTCAGGTAGAACTGCTCCTTCCCTGTA
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GCTTCTAGTCCCCTGATCATCGCTGTTGCTCTTCTTGAATCTTTCTTAAAGCTTGGAGCCCAGAATGGGAC
ACAGTAAGATGGGATTTAACCAAAGCATAGTTCTTATCAGAAACCATCTCCACATCTTTACAGTCTTAGAAT
CTCTGAATCTTACTTCTAAAATTTATATCAGGAATGCTTTGCATTAGTGCAGACCTGTAGATTTTCAATTGCTG
CATGTACCATACAAAATTTCTTCTCTCCCTCCTCCCCAC

>AIM1 1500KB upstream region

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AAAATGGAATAATAGATGATAGAAAAGAAGGCAAAACCACAGTTTTGCCTGACAGACAAATCCTAGGACCTA

CAAAGACTGTGGCAGCAGCAAACATGCCCACTCCCTTTATTGGTTTCCTTCTTAATGGAATATTATTTTTATG
CTTTTTTTAAAATGGTAGGTTGGCTTGAGTGTCAAAAAGAAAATAAATGTTAAATGTGTTTTCTGAAACCTAC
ATGGAATTTTCAGTTTCAGATTCAACTACCCTCTGCTTAAGCATTACTCCCAAATCACAGCATATCAGGAAAAT
CCTCTGTCAACTGCAAAGACAGAAGATGGCCCTGTGTATTATTTTTTCATCAAACATCAATATAATTTTTAAATT
TTTGCATTTTTTGGAGCCAATGGGGAATTTTTTTCTATCATAAATTGAAAATGGAGGGGTAGCTTCTATCAGG
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GAGTCTCTCCCTTCTCGGGTAACACGCAGTATGAAGGGGAGCTGGAGTGGCAGTCAATTTTCTGCTTCAAGAC
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ATAGGAGCGAGAGATAAACTTAATAAAGGCACGAAGAGGAGACAGGCGAATTCGTGGCCGTGCTTGAAGT
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>MLANA 1500KB upstream region

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TAGTATAACCAGTTAGATCTTTAATCAAATAGTTGTTTCATCAAGTAGTTTAATTACGTTTCAGGGACTTACCC
CTAAATGTATATCAGACTGCATCTTGAGTTCCTGAATTTGAGTTGAAGTTACCAGATTTAGATGCAAAGCTAA
ATGTATTTTTTAATATAAGTATTTATTAATTTTATATACTGCTTCTTTTTGAAGAGGCCCTAAGTGGTGTATAT
AATAAGTGACGGTAATATGACACCAATGCAAAATACCATGGAATACAGAACAAAAAACACCATCGGCATACA
AAGTTCATTTATAGATATGAAAATGCTGAGAAACGTGGAGGTTGAGAGGGATTGAATGTTGTCATCTCACCCA
TAAACAGTCACTGGGAATTCCTACCAGTACCCTCACCTACTACTCTCGCATAAGGGCATGAATTTGGTTGGAAT
CTAATTGCTCAAAGACAAAACAGAAAGTGATAATACCAGACCTTCAATAAATCCTATCACAAACAAACCTGAAA
AATCTAGAAGATGAAGAACACATTTTTTAGCATCTTCTCCAAAGTCTTTTCAACAAAAAAATGTAAATGATTGT
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TGTTTTCTGTTTCATTTGAGGAATATATCAACATTGTTTCGTTATGAATTAATCTGAATAGAGTTTTAAAAGA
GCAGGATGTTGATAGTAAATTAATTTCTCACCAAAGCTTTTCTCCCAGCTATTCTTCTCCCAGTATT
ACTCAAAGGAAAAAGGCAAGTAGGAAGACGTATTCTGGGGGCAAATGTAAGAATCATTAGAAGTTTTTTTTG
C
ACCCTAAATGTGAGTGCATGCACAGTTTATACCAGATTGGACAGGACTGGAGATGGGTCATAATCCTGGATCT
TATTTTGCTTTTAGAAAAC TAGCAAATAAGCTATTGAGTTGTATAAGTAGGCACTATCTGATGACAGGTTTT
GAATACAGAGAAAGTTCTATTGCATCTTATAATGTCTAAAAGATAAAATTGCCTCAGATTGATCTTAAATCCT
GGTAATTTTATATAGACACATCCTTGCAGTTTTCTTGCCATAATACAGAAGTGATTTTTTTCATGTTTTCTCCCA
GGAATTTTTTATTTCATTTTCCCAGTTTAGGTCATAGCTCTGGATTTCCCAGATGTTCCCCACAATCCTGATGA
AATTTCTAGATCAGCCAAGGTTAGCTAAATCCCTTTTTGTTAGTATTGCCATGGATTTTCAGGAAGACTGGTC
CTGTTTTTTTTATAATTTATTACATGTATAGTTTTAAA

>MC1R 1500KB upstream region

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TCCACCTGGCTCACCTTGATGGCAACGGTCAGGTGCAGCGACCACCTTCCTTGGTTTCTTCTCCATCATAAG
TGATCACTCCGGGGTCCAACAAAGGTGGCAGTTTGGCTGCTTTGCCCTGGGTGCCTCCACATCAGTTAGCAT
GATCTAGAGATTACGGGGCATTTGTACATCTGGACAGGCAGAAAAATTATCCCTTGATATGCCCTACAGATC
CAATCTCAGAAGAATTTGACTACTAATCGAATAACATGCCATAATAATAAAGAAACAGACTCAGAAGTAGATG
ATGATTCTTTCAAATTCCTCATGGCAGAGACCTTTTACCACCACCCAGTTAAAAAAAAGGGGGGGGTCAGA

AAACTGGCCGTGCTGAAGGCTAAAAGAAGGCATCCTATCAATATATGGGGTGTGTGTAGATAACTCAAGAAGT
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TCTGAACATAACAGGAACCATGCTGAAAGAAATATAGGAAAGGGTACTTAAAAGAACGGCATATCAGATATGG
TTGACGCTGTCCTTGGCACAACCTGGCTCAGCAGCAGCGTGGCCCAGCACTCTCTCTGCTGCCACCCGTGGCC
CACATTCCACCACTCCACCTTGGGAGCCCAGGTGATGATAATCCATTCTGTTTCTGGTTTTGTAGCACTTCA
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ATAACATCTCCCTGCCTTCAAAGTGCTCGCCGCCTGACTTATCATCATGTGCATCACCCCTCTGCCCCCTGC
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GATCTCACCATCTGGGATTTTCTGGGAGGAAAAGTGCTGACAGAGGAACCTGTAGCCTACAGGTGAGTGTG
GGACAGGCTAAAATAACCTGCATTCATCTAAAATCACTTCAGAAGAAACGCTCTTCCAAAATCTGTGTCCCC
CCTCTTATTTCTCACTAGCAGCGCCACAAAGTGTGAG

>RAB27A 1500KB upstream region

CATTTTCTTAGAACATTATCCACGTGCATAAGAATGCGGTCACATTTTAAAGTGCCTTTTGCCGAACTTAAGT
GCTGCCAATTAATAGGCCCTGTGAACCTCGTTTCTGCTTATGTCCTCAATCAAAGGAGCAGACCCCTCCTT
TAGGCACTCTCCCCACTTCTGCCAAGGGCCTCTCATTTCCATGGCACAAACTCAGTCACGCTGCGCTGTGGA
CCAGCCTTCCCTATGGTGTCTCCGTGTTGGCCCAGGTTCAAGATGCTCTTAAATAACGCGCTAAAAGGATTTTT
TTTCTCATGCACTCTGTTCCACCATAATAGCTGAAACAAGTCTTTATTAAGGAGTCATATGATGCTGATTATA
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CCTGTTGGAGTTCTTCTGAATTCAGTTCTCTTTAAACACTACACATGCAAGGAGATGTGGAGAATTTGGCA
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CTACAGAAGCCTTCAGCCGGGGACAAGGCTGCTTCCAAGGACTGCCAGAGAGTTCCCTTCCCTCTTCCACGG
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>MITF 1500bp upstream region

AAATGTATGTTTCATCTCAAGAAAGTCTTATATAGGTATAAGATTTATTTGGACACTGATCCCTGTTTAGATCT
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CACTGCCTTGAGTTGCAAAAATAAAGACAGGATATCAGTCTAATAATCAATAAATCTATAGGGACCTCTTATT
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>Oa1 1500KB upstream region

TGTAGACTTCAACTCTCNN
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>PMEL 1500KB upstream region

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ACCCTGCAGTTTTCAGAAATTTGTAAGAGGTCATCCCTATACAACAGTGTCTTCAACCTTGGAACCTTAAAG
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TCTGCATTCCATGACTTTGTCCAGAAATGTAGGACCACAGCAAACCCTGCCTCGCCTGCTGTCCAAGAAACCC

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TTCCAGAATTTGAGATGCCACCCTCGTTCCCCACTTCTAGCTCTAGAATTGCCAGGCATGCTTCTGTTTCTT
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TGCAGTGTCCATCAACGGGGCAGCTGGAAATCTATTCCCTTATGAGGTGGCCTATTGGCGCTGACCAGGTCAG
GCAAATTTCTGGACTACCATTTCAGCTAGCAACTGGGGAATCGCCATTTGACTGCTCTTCCACACATAAATGGCT
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-- Factors predicted by PROMO in these sequences -----

NAME; MATRIX_WIDTH;
POU3F2 [T00630]; 7
USF-1 [T00875]; 7
Mitf [T01554]; 13
USF1 [T00874]; 9
LEF-1 [T02905]; 8
FOXD3 [T02290]; 8
FOXD3 [T04166]; 11
USF-1 [T00877]; 11
CREB [T00989]; 10
CREB [T00163]; 9
CREB [T00164]; 9

-- PROMO predictions detail -----

Sequence name; Factor name; Start position; End position; Dissimilarity;
String; RE equally; RE query
DCT 1500KB upstream region; POU3F2 [T00630]; 41; 47; 0.000000; AAATGAA;
0.18311; 0.21080;
DCT 1500KB upstream region; POU3F2 [T00630]; 47; 53; 8.841973; AAATCTC;
0.27466; 0.33169;
DCT 1500KB upstream region; POU3F2 [T00630]; 160; 166; 5.963103;
AGAATTT; 0.73242; 0.98415;
DCT 1500KB upstream region; POU3F2 [T00630]; 174; 180; 8.361098;
AAATCGG; 0.64087; 0.67044;
DCT 1500KB upstream region; POU3F2 [T00630]; 203; 209; 5.457738;
ATCATTT; 0.73242; 0.73821;
DCT 1500KB upstream region; POU3F2 [T00630]; 261; 267; 5.963103;
AAATAAG; 0.73242; 0.98415;
DCT 1500KB upstream region; POU3F2 [T00630]; 276; 282; 7.730221;
AAATATG; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 462; 468; 5.963103;
AGTATTT; 0.73242; 0.98415;
DCT 1500KB upstream region; POU3F2 [T00630]; 466; 472; 0.505365;
TTTATTT; 0.54932; 0.77377;
DCT 1500KB upstream region; POU3F2 [T00630]; 554; 560; 7.730221;
AAAATTT; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 555; 561; 9.094656;
AAATTTTC; 0.27466; 0.33169;
DCT 1500KB upstream region; POU3F2 [T00630]; 561; 567; 5.963103;
CTTATTT; 0.73242; 0.98415;
DCT 1500KB upstream region; POU3F2 [T00630]; 600; 606; 7.730221;

AAATATT; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 601; 607; 7.730221;
AAATATTT; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 608; 614; 7.730221;
AAAATTT; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 609; 615; 7.730221;
AAATTTG; 0.91553; 1.19566;
DCT 1500KB upstream region; POU3F2 [T00630]; 750; 756; 2.650678;
AAATGGA; 0.27466; 0.41195;
DCT 1500KB upstream region; POU3F2 [T00630]; 759; 765; 0.000000;
TTCATTT; 0.18311; 0.21080;
DCT 1500KB upstream region; POU3F2 [T00630]; 815; 821; 8.589292;
AAATGTC; 0.64087; 0.67044;
DCT 1500KB upstream region; POU3F2 [T00630]; 819; 825; 6.822173;
GTCATTT; 0.54932; 0.52790;
DCT 1500KB upstream region; POU3F2 [T00630]; 970; 976; 5.963103;
ATAATTT; 0.73242; 0.98415;
DCT 1500KB upstream region; POU3F2 [T00630]; 1225; 1231; 2.272484;
AAATATA; 0.27466; 0.41195;
DCT 1500KB upstream region; POU3F2 [T00630]; 1232; 1238; 8.841973;
AAATCTC; 0.27466; 0.33169;
DCT 1500KB upstream region; POU3F2 [T00630]; 1362; 1368; 9.978215;
AAATTGC; 0.18311; 0.18057;
DCT 1500KB upstream region; POU3F2 [T00630]; 1441; 1447; 0.000000;
TGCATTT; 0.18311; 0.21080;
DCT 1500KB upstream region; USF-1 [T00875]; 96; 102; 5.121209; CCACATA;
0.73242; 0.41833;
DCT 1500KB upstream region; USF-1 [T00875]; 363; 369; 11.575332;
CCACGAC; 1.09863; 0.59829;
DCT 1500KB upstream region; USF-1 [T00875]; 434; 440; 0.031764; CAGGTGG;
0.36621; 0.17808;
DCT 1500KB upstream region; USF-1 [T00875]; 619; 625; 5.974743; AATGTGG;
0.36621; 0.23847;
DCT 1500KB upstream region; USF-1 [T00875]; 804; 810; 0.031764; CAGGTGG;
0.36621; 0.17808;
DCT 1500KB upstream region; USF-1 [T00875]; 896; 902; 0.000000; CATGTGG;
0.36621; 0.17808;
DCT 1500KB upstream region; USF-1 [T00875]; 957; 963; 9.731297; GCTGTGG;
0.36621; 0.15583;
DCT 1500KB upstream region; USF-1 [T00875]; 1021; 1027; 9.731297;
CCACAGC; 0.36621; 0.15583;
DCT 1500KB upstream region; USF-1 [T00875]; 1040; 1046; 11.575332;
GTCGTGG; 1.09863; 0.59829;
DCT 1500KB upstream region; USF-1 [T00875]; 1290; 1296; 5.974743;
CCACATT; 0.36621; 0.23847;
DCT 1500KB upstream region; USF-1 [T00875]; 1452; 1458; 4.610088;
CCACAGG; 0.36621; 0.13317;
DCT 1500KB upstream region; Mitf [T01554]; 692; 704; 13.639481;
GGGACATGACTGA; 0.00563; 0.00244;
DCT 1500KB upstream region; Mitf [T01554]; 891; 903; 14.563599;
TCTGCCATGTGGT; 0.02535; 0.01042;
DCT 1500KB upstream region; Mitf [T01554]; 1158; 1170; 2.772353;
AATGTCATGTGCT; 0.00282; 0.00123;
DCT 1500KB upstream region; USF1 [T00874]; 904; 912; 8.481293;

AGCTCGTGA; 0.22316; 0.08113;
DCT 1500KB upstream region; LEF-1 [T02905]; 449; 456; 1.835267;
CTTTGCTT; 0.13733; 0.10092;
DCT 1500KB upstream region; LEF-1 [T02905]; 685; 692; 0.904249;
CTTTGTTG; 0.06866; 0.06728;
DCT 1500KB upstream region; LEF-1 [T02905]; 986; 993; 7.080257;
TTACAAAG; 0.09155; 0.08101;
DCT 1500KB upstream region; LEF-1 [T02905]; 995; 1002; 7.737185;
TCTCAAAG; 0.16022; 0.10553;
DCT 1500KB upstream region; LEF-1 [T02905]; 1088; 1095; 0.531842;
AATCAAAG; 0.09155; 0.08561;
DCT 1500KB upstream region; LEF-1 [T02905]; 1260; 1267; 0.904249;
CAACAAAG; 0.06866; 0.06728;
DCT 1500KB upstream region; LEF-1 [T02905]; 1318; 1325; 1.835267;
AAGCAAAG; 0.13733; 0.10092;
DCT 1500KB upstream region; FOXD3 [T02290]; 54; 61; 0.461834; AAACAATT;
0.09155; 0.11425;
DCT 1500KB upstream region; FOXD3 [T02290]; 67; 74; 0.833571; AAACAAAC;
0.09155; 0.11446;
DCT 1500KB upstream region; FOXD3 [T02290]; 284; 291; 1.875536;
AAACAAGC; 0.22888; 0.22054;
DCT 1500KB upstream region; FOXD3 [T02290]; 513; 520; 4.743818;
AAACACAG; 0.13733; 0.12406;
DCT 1500KB upstream region; FOXD3 [T02290]; 577; 584; 1.851876;
AAACAACA; 0.22888; 0.22054;
DCT 1500KB upstream region; FOXD3 [T02290]; 768; 775; 3.910247;
AAACTGTG; 0.11444; 0.10419;
DCT 1500KB upstream region; FOXD3 [T02290]; 801; 808; 5.320522;
AAACAGGT; 0.13733; 0.10109;
DCT 1500KB upstream region; FOXD3 [T02290]; 1257; 1264; 1.851876;
AAACAACA; 0.22888; 0.22054;
DCT 1500KB upstream region; FOXD3 [T02290]; 1273; 1280; 3.444986;
AACTGTTT; 0.09155; 0.08583;
DCT 1500KB upstream region; FOXD3 [T04166]; 114; 124; 8.459600;
ACAGTAACAAC; 0.00429; 0.00335;
DCT 1500KB upstream region; FOXD3 [T04166]; 1256; 1266; 14.158476;
CAAACAACAAA; 0.09012; 0.11075;
DCT 1500KB upstream region; USF-1 [T00877]; 895; 905; 2.080477;
CCATGTGGTAG; 0.02003; 0.01131;
DCT 1500KB upstream region; USF-1 [T00877]; 1162; 1172; 0.693492;
TCATGTGCTAA; 0.01144; 0.00719;
TYR 1500KB upstream region; POU3F2 [T00630]; 34; 40; 7.074855; AAATCCC;
0.54932; 0.52790;
TYR 1500KB upstream region; POU3F2 [T00630]; 57; 63; 3.156043; AAATTGA;
0.27466; 0.33133;
TYR 1500KB upstream region; POU3F2 [T00630]; 89; 95; 0.505365; TGTATTT;
0.54932; 0.77377;
TYR 1500KB upstream region; POU3F2 [T00630]; 118; 124; 0.000000;
AAATGAA; 0.18311; 0.21080;
TYR 1500KB upstream region; POU3F2 [T00630]; 300; 306; 5.963103;
AAATTCT; 0.73242; 0.98415;
TYR 1500KB upstream region; POU3F2 [T00630]; 313; 319; 5.457738;
AGCATTT; 0.73242; 0.73821;
TYR 1500KB upstream region; POU3F2 [T00630]; 337; 343; 7.224857;

CACATTT; 0.54932; 0.52790;
TYR 1500KB upstream region; POU3F2 [T00630]; 374; 380; 5.963103;
CTTATTT; 0.73242; 0.98415;
TYR 1500KB upstream region; POU3F2 [T00630]; 437; 443; 5.710420;
CTGATTT; 0.73242; 0.73821;
TYR 1500KB upstream region; POU3F2 [T00630]; 486; 492; 5.963103;
AGTATTT; 0.73242; 0.98415;
TYR 1500KB upstream region; POU3F2 [T00630]; 511; 517; 0.000000;
TGCATTT; 0.18311; 0.21080;
TYR 1500KB upstream region; POU3F2 [T00630]; 587; 593; 5.457738;
AGCATTT; 0.73242; 0.73821;
TYR 1500KB upstream region; POU3F2 [T00630]; 612; 618; 7.730221;
AATATTT; 0.91553; 1.19566;
TYR 1500KB upstream region; POU3F2 [T00630]; 688; 694; 0.000000;
TTCATTT; 0.18311; 0.21080;
TYR 1500KB upstream region; POU3F2 [T00630]; 808; 814; 0.000000;
TGCATTT; 0.18311; 0.21080;
TYR 1500KB upstream region; POU3F2 [T00630]; 932; 938; 7.074855;
GGGATTT; 0.54932; 0.52790;
TYR 1500KB upstream region; POU3F2 [T00630]; 1093; 1099; 7.327537;
GTAATTT; 0.91553; 1.19566;
TYR 1500KB upstream region; POU3F2 [T00630]; 1238; 1244; 5.457738;
AAATGCT; 0.73242; 0.73821;
TYR 1500KB upstream region; POU3F2 [T00630]; 1325; 1331; 7.074855;
GGGATTT; 0.54932; 0.52790;
TYR 1500KB upstream region; POU3F2 [T00630]; 1406; 1412; 5.963103;
AAATTAT; 0.73242; 0.98415;
TYR 1500KB upstream region; POU3F2 [T00630]; 1444; 1450; 2.019801;
TAGATTT; 0.18311; 0.24110;
TYR 1500KB upstream region; POU3F2 [T00630]; 1474; 1480; 5.963103;
AAATTCT; 0.73242; 0.98415;
TYR 1500KB upstream region; USF-1 [T00875]; 832; 838; 11.506849;
CCACGCT; 1.09863; 0.59829;
TYR 1500KB upstream region; USF-1 [T00875]; 840; 846; 5.152973; TAGGTGG;
0.73242; 0.41833;
TYR 1500KB upstream region; USF-1 [T00875]; 904; 910; 12.460630;
CCACCAT; 0.36621; 0.23857;
TYR 1500KB upstream region; USF-1 [T00875]; 963; 969; 9.731297; GCTGTGG;
0.36621; 0.15583;
TYR 1500KB upstream region; USF-1 [T00875]; 1004; 1010; 11.607096;
CCACTAC; 1.09863; 0.59829;
TYR 1500KB upstream region; USF-1 [T00875]; 1029; 1035; 9.763061;
CCACTGC; 0.36621; 0.15632;
TYR 1500KB upstream region; USF-1 [T00875]; 1049; 1055; 6.485888;
CCACTAG; 0.36621; 0.17813;
TYR 1500KB upstream region; USF-1 [T00875]; 1364; 1370; 5.121209;
CCACATC; 0.73242; 0.41833;
TYR 1500KB upstream region; LEF-1 [T02905]; 245; 252; 7.720010;
GGTCAAAG; 0.16022; 0.10553;
TYR 1500KB upstream region; LEF-1 [T02905]; 973; 980; 1.835267;
CTTTGCTT; 0.13733; 0.10092;
TYR 1500KB upstream region; LEF-1 [T02905]; 1332; 1339; 2.021471;
AACCAAAG; 0.13733; 0.10092;
TYR 1500KB upstream region; LEF-1 [T02905]; 1423; 1430; 8.011275;

CTTTGCAT; 0.22888; 0.16519;
TYR 1500KB upstream region; FOXD3 [T02290]; 17; 24; 2.060269; TCATGTTT;
0.22888; 0.22054;
TYR 1500KB upstream region; FOXD3 [T02290]; 284; 291; 0.461834;
AATTGTTT; 0.09155; 0.11425;
TYR 1500KB upstream region; FOXD3 [T02290]; 325; 332; 0.184733;
AAACAATA; 0.09155; 0.11443;
TYR 1500KB upstream region; FOXD3 [T02290]; 463; 470; 3.910247;
CAGTGTTT; 0.11444; 0.10419;
TYR 1500KB upstream region; FOXD3 [T02290]; 595; 602; 4.835029;
AAACAGCA; 0.18311; 0.12873;
TYR 1500KB upstream region; FOXD3 [T02290]; 1013; 1020; 4.370924;
CTCTGTTT; 0.13733; 0.12406;
TYR 1500KB upstream region; FOXD3 [T02290]; 1104; 1111; 4.743818;
CTGTGTTT; 0.13733; 0.12406;
TYR 1500KB upstream region; FOXD3 [T04166]; 473; 483; 7.969909;
CTTGTTGATAT; 0.00572; 0.00596;
TYR 1500KB upstream region; USF-1 [T00877]; 694; 704; 14.506027;
TCATATGATAT; 0.10300; 0.08274;
TYR 1500KB upstream region; CREB [T00989]; 2; 11; 14.841915; TGACTTCACT;
0.07725; 0.03507;
AIM1 1500KB upstream region; POU3F2 [T00630]; 1; 7; 5.710420; AGGATTT;
0.73242; 0.73821;
AIM1 1500KB upstream region; POU3F2 [T00630]; 31; 37; 7.224857; AACATTT;
0.54932; 0.52790;
AIM1 1500KB upstream region; POU3F2 [T00630]; 74; 80; 2.650678; AAATGGA;
0.27466; 0.41195;
AIM1 1500KB upstream region; POU3F2 [T00630]; 80; 86; 5.963103; AAATAAT;
0.73242; 0.98415;
AIM1 1500KB upstream region; POU3F2 [T00630]; 131; 137; 5.710420;
AAATCCT; 0.73242; 0.73821;
AIM1 1500KB upstream region; POU3F2 [T00630]; 207; 213; 5.963103;
ATTATTT; 0.73242; 0.98415;
AIM1 1500KB upstream region; POU3F2 [T00630]; 228; 234; 8.108417;
AAATGGT; 0.18311; 0.15867;
AIM1 1500KB upstream region; POU3F2 [T00630]; 258; 264; 0.505365;
AAATAAA; 0.54932; 0.77377;
AIM1 1500KB upstream region; POU3F2 [T00630]; 262; 268; 7.224857;
AAATGTT; 0.54932; 0.52790;
AIM1 1500KB upstream region; POU3F2 [T00630]; 269; 275; 7.224857;
AAATGTG; 0.54932; 0.52790;
AIM1 1500KB upstream region; POU3F2 [T00630]; 294; 300; 7.327537;
GGAATTT; 0.91553; 1.19566;
AIM1 1500KB upstream region; POU3F2 [T00630]; 342; 348; 7.074855;
AAATCAC; 0.54932; 0.52790;
AIM1 1500KB upstream region; POU3F2 [T00630]; 361; 367; 5.710420;
AAATCCT; 0.73242; 0.73821;
AIM1 1500KB upstream region; POU3F2 [T00630]; 402; 408; 5.963103;
ATTATTT; 0.73242; 0.98415;
AIM1 1500KB upstream region; POU3F2 [T00630]; 425; 431; 5.963103;
ATAATTT; 0.73242; 0.98415;
AIM1 1500KB upstream region; POU3F2 [T00630]; 432; 438; 2.272484;
TAAATTT; 0.27466; 0.41195;
AIM1 1500KB upstream region; POU3F2 [T00630]; 433; 439; 7.730221;

AAATTTT; 0.91553; 1.19566;
AIM1 1500KB upstream region; POU3F2 [T00630]; 440; 446; 0.000000;
TGCATTT; 0.18311; 0.21080;
AIM1 1500KB upstream region; POU3F2 [T00630]; 460; 466; 7.327537;
GGAATTT; 0.91553; 1.19566;
AIM1 1500KB upstream region; POU3F2 [T00630]; 478; 484; 3.156043;
AAATTGA; 0.27466; 0.33133;
AIM1 1500KB upstream region; POU3F2 [T00630]; 486; 492; 2.650678;
AAATGGA; 0.27466; 0.41195;
AIM1 1500KB upstream region; POU3F2 [T00630]; 546; 552; 7.327537;
GTAATTT; 0.91553; 1.19566;
AIM1 1500KB upstream region; POU3F2 [T00630]; 556; 562; 8.613781;
AAATTGT; 0.64087; 0.67044;
AIM1 1500KB upstream region; POU3F2 [T00630]; 659; 665; 1.767119;
TACATTT; 0.18311; 0.24110;
AIM1 1500KB upstream region; POU3F2 [T00630]; 729; 735; 0.505365;
AAATAAA; 0.54932; 0.77377;
AIM1 1500KB upstream region; POU3F2 [T00630]; 733; 739; 9.725533;
AAATCGC; 0.18311; 0.13544;
AIM1 1500KB upstream region; POU3F2 [T00630]; 841; 847; 0.505365;
AAATACA; 0.54932; 0.77377;
AIM1 1500KB upstream region; POU3F2 [T00630]; 869; 875; 0.505365;
AAATAAA; 0.54932; 0.77377;
AIM1 1500KB upstream region; POU3F2 [T00630]; 875; 881; 7.074855;
AAATCCC; 0.54932; 0.52790;
AIM1 1500KB upstream region; POU3F2 [T00630]; 888; 894; 8.841973;
AAATCTC; 0.27466; 0.33169;
AIM1 1500KB upstream region; POU3F2 [T00630]; 947; 953; 1.767119;
AAATGTA; 0.18311; 0.24110;
AIM1 1500KB upstream region; POU3F2 [T00630]; 954; 960; 9.978215;
GCAATTT; 0.18311; 0.18057;
AIM1 1500KB upstream region; POU3F2 [T00630]; 979; 985; 5.963103;
CTTATTT; 0.73242; 0.98415;
AIM1 1500KB upstream region; POU3F2 [T00630]; 983; 989; 0.505365;
TTTATTT; 0.54932; 0.77377;
AIM1 1500KB upstream region; POU3F2 [T00630]; 996; 1002; 7.730221;
CAAATTT; 0.91553; 1.19566;
AIM1 1500KB upstream region; POU3F2 [T00630]; 997; 1003; 2.272484;
AAATTTA; 0.27466; 0.41195;
AIM1 1500KB upstream region; POU3F2 [T00630]; 1097; 1103; 5.457738;
ATCATTT; 0.73242; 0.73821;
AIM1 1500KB upstream region; POU3F2 [T00630]; 1145; 1151; 9.978215;
GCAATTT; 0.18311; 0.18057;
AIM1 1500KB upstream region; POU3F2 [T00630]; 1222; 1228; 3.156043;
TCAATTT; 0.27466; 0.33133;
AIM1 1500KB upstream region; POU3F2 [T00630]; 1313; 1319; 8.613781;
AAATAGG; 0.64087; 0.67044;
AIM1 1500KB upstream region; USF-1 [T00875]; 52; 58; 5.152973; GAAGTGG;
0.73242; 0.41833;
AIM1 1500KB upstream region; USF-1 [T00875]; 110; 116; 4.610088;
CCACAGG; 0.36621; 0.13317;
AIM1 1500KB upstream region; USF-1 [T00875]; 151; 157; 10.584831;
ACTGTGG; 1.09863; 0.49365;
AIM1 1500KB upstream region; USF-1 [T00875]; 173; 179; 10.685079;

CCACTCC; 1.09863; 0.49365;
AIM1 1500KB upstream region; USF-1 [T00875]; 318; 324; 11.538613;
CCACTCT; 1.09863; 0.59829;
AIM1 1500KB upstream region; USF-1 [T00875]; 580; 586; 10.685079;
TGAGTGG; 1.09863; 0.49365;
AIM1 1500KB upstream region; USF-1 [T00875]; 747; 753; 9.763061;
TCAGTGG; 0.36621; 0.15632;
AIM1 1500KB upstream region; USF-1 [T00875]; 768; 774; 0.000000;
CCACATG; 0.36621; 0.17808;
AIM1 1500KB upstream region; USF-1 [T00875]; 784; 790; 5.563870;
CGGGTGG; 0.36621; 0.13403;
AIM1 1500KB upstream region; USF-1 [T00875]; 1212; 1218; 10.685079;
GGAGTGG; 1.09863; 0.49365;
AIM1 1500KB upstream region; USF-1 [T00875]; 1241; 1247; 11.575332;
CCACGAA; 1.09863; 0.59829;
AIM1 1500KB upstream region; USF-1 [T00875]; 1366; 1372; 11.575332;
TTCGTGG; 1.09863; 0.59829;
AIM1 1500KB upstream region; USF-1 [T00875]; 1407; 1413; 5.152973;
GAGGTGG; 0.73242; 0.41833;
AIM1 1500KB upstream region; Mitf [T01554]; 767; 779; 7.618192;
GCCACATGAATGG; 0.00778; 0.00415;
AIM1 1500KB upstream region; LEF-1 [T02905]; 143; 150; 7.080257;
CTACAAAG; 0.09155; 0.08101;
AIM1 1500KB upstream region; LEF-1 [T02905]; 375; 382; 8.011275;
CTGCAAAG; 0.22888; 0.16519;
AIM1 1500KB upstream region; LEF-1 [T02905]; 673; 680; 8.011275;
ATGCAAAG; 0.22888; 0.16519;
AIM1 1500KB upstream region; LEF-1 [T02905]; 895; 902; 1.835267;
CTTTGCTT; 0.13733; 0.10092;
AIM1 1500KB upstream region; LEF-1 [T02905]; 900; 907; 6.707850;
CTTCAAAG; 0.09155; 0.08561;
AIM1 1500KB upstream region; LEF-1 [T02905]; 1266; 1273; 0.372407;
GAACAAAG; 0.09155; 0.08561;
AIM1 1500KB upstream region; LEF-1 [T02905]; 1486; 1493; 2.021471;
CTTTGGTT; 0.13733; 0.10092;
AIM1 1500KB upstream region; FOXD3 [T02290]; 30; 37; 0.461834; AACATTT;
0.09155; 0.11425;
AIM1 1500KB upstream region; FOXD3 [T02290]; 165; 172; 1.875536;
AAACATGC; 0.22888; 0.22054;
AIM1 1500KB upstream region; FOXD3 [T02290]; 271; 278; 4.651452;
ATGTGTTT; 0.13733; 0.12406;
AIM1 1500KB upstream region; FOXD3 [T02290]; 415; 422; 1.851876;
AAACATCA; 0.22888; 0.22054;
AIM1 1500KB upstream region; FOXD3 [T02290]; 791; 798; 4.858688;
GCCTGTTT; 0.18311; 0.12873;
AIM1 1500KB upstream region; FOXD3 [T02290]; 847; 854; 1.295405;
AAACATAT; 0.13733; 0.15122;
AIM1 1500KB upstream region; FOXD3 [T02290]; 1048; 1055; 2.060269;
AAACAAGA; 0.22888; 0.22054;
AIM1 1500KB upstream region; FOXD3 [T02290]; 1120; 1127; 1.851876;
AAACAACA; 0.22888; 0.22054;
AIM1 1500KB upstream region; FOXD3 [T04166]; 868; 878; 13.371894;
AAAATAAAAAT; 0.06008; 0.08496;
AIM1 1500KB upstream region; FOXD3 [T04166]; 958; 968; 13.371894;

TTTGTCTTTTT; 0.06008; 0.08496;
AIM1 1500KB upstream region; FOXD3 [T04166]; 979; 989; 14.158476;
CTTATTTATTT; 0.09012; 0.11075;
AIM1 1500KB upstream region; FOXD3 [T04166]; 1093; 1103; 14.945058;
GTTGATCATTT; 0.06008; 0.06359;
AIM1 1500KB upstream region; FOXD3 [T04166]; 1116; 1126; 3.932910;
AAAGAAACAAC; 0.00286; 0.00342;
AIM1 1500KB upstream region; FOXD3 [T04166]; 1119; 1129; 14.158476;
GAAACAACAAC; 0.09012; 0.11075;
AIM1 1500KB upstream region; USF-1 [T00877]; 765; 775; 0.000000;
TTGCCACATGA; 0.00572; 0.00447;
MLANA 1500KB upstream region; POU3F2 [T00630]; 27; 33; 8.613781;
CCAATTT; 0.64087; 0.67044;
MLANA 1500KB upstream region; POU3F2 [T00630]; 60; 66; 8.841973;
GAGATTT; 0.27466; 0.33169;
MLANA 1500KB upstream region; POU3F2 [T00630]; 96; 102; 5.710420;
AAATCCT; 0.73242; 0.73821;
MLANA 1500KB upstream region; POU3F2 [T00630]; 108; 114; 7.327537;
GTAATTT; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 117; 123; 5.963103;
AAATAAT; 0.73242; 0.98415;
MLANA 1500KB upstream region; POU3F2 [T00630]; 135; 141; 0.505365;
TGAATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 172; 178; 8.613781;
AAATAGT; 0.64087; 0.67044;
MLANA 1500KB upstream region; POU3F2 [T00630]; 221; 227; 1.767119;
AAATGTA; 0.18311; 0.24110;
MLANA 1500KB upstream region; POU3F2 [T00630]; 251; 257; 0.505365;
TGAATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 271; 277; 7.477539;
CAGATTT; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 290; 296; 1.767119;
AAATGTA; 0.18311; 0.24110;
MLANA 1500KB upstream region; POU3F2 [T00630]; 293; 299; 0.505365;
TGTATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 308; 314; 5.963103;
AGTATTT; 0.73242; 0.98415;
MLANA 1500KB upstream region; POU3F2 [T00630]; 317; 323; 2.272484;
TAAATTT; 0.27466; 0.41195;
MLANA 1500KB upstream region; POU3F2 [T00630]; 318; 324; 2.272484;
AAATTTA; 0.27466; 0.41195;
MLANA 1500KB upstream region; POU3F2 [T00630]; 395; 401; 7.327537;
AAATACC; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 441; 447; 0.000000;
TTCATTT; 0.18311; 0.21080;
MLANA 1500KB upstream region; POU3F2 [T00630]; 458; 464; 5.457738;
AAATGCT; 0.73242; 0.73821;
MLANA 1500KB upstream region; POU3F2 [T00630]; 631; 637; 5.710420;
AAATCCT; 0.73242; 0.73821;
MLANA 1500KB upstream region; POU3F2 [T00630]; 656; 662; 2.019801;
AAATCTA; 0.18311; 0.24110;
MLANA 1500KB upstream region; POU3F2 [T00630]; 675; 681; 7.224857;
CACATTT; 0.54932; 0.52790;
MLANA 1500KB upstream region; POU3F2 [T00630]; 714; 720; 1.767119;

AAATGTA; 0.18311; 0.24110;
MLANA 1500KB upstream region; POU3F2 [T00630]; 720; 726; 5.457738;
AAATGAT; 0.73242; 0.73821;
MLANA 1500KB upstream region; POU3F2 [T00630]; 760; 766; 9.978215;
GCTATTT; 0.18311; 0.18057;
MLANA 1500KB upstream region; POU3F2 [T00630]; 813; 819; 0.000000;
TTCATTT; 0.18311; 0.21080;
MLANA 1500KB upstream region; POU3F2 [T00630]; 892; 898; 7.327537;
AAATTAC; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 899; 905; 0.505365;
TTAATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 993; 999; 1.767119;
AAATGTA; 0.18311; 0.24110;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1028; 1034; 7.224857;
AAATGTG; 0.54932; 0.52790;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1094; 1100; 5.963103;
CTTATTT; 0.73242; 0.98415;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1120; 1126; 5.963103;
AAATAAG; 0.73242; 0.98415;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1214; 1220; 9.978215;
AAATTGC; 0.18311; 0.18057;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1235; 1241; 5.710420;
AAATCCT; 0.73242; 0.73821;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1243; 1249; 7.327537;
GTAATTT; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1291; 1297; 7.074855;
GTGATTT; 0.54932; 0.52790;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1315; 1321; 7.327537;
GGAATTT; 0.91553; 1.19566;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1326; 1332; 0.000000;
TTCATTT; 0.18311; 0.21080;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1354; 1360; 0.252682;
TGGATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1386; 1392; 9.094656;
GAAATTT; 0.27466; 0.33169;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1387; 1393; 9.094656;
AAATTTTC; 0.27466; 0.33169;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1414; 1420; 7.074855;
AAATCCC; 0.54932; 0.52790;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1440; 1446; 0.252682;
TGGATTT; 0.54932; 0.77377;
MLANA 1500KB upstream region; POU3F2 [T00630]; 1473; 1479; 7.730221;
AATATTT; 0.91553; 1.19566;
MLANA 1500KB upstream region; USF-1 [T00875]; 70; 76; 4.641852; CCAAGTGG;
0.36621; 0.13317;
MLANA 1500KB upstream region; USF-1 [T00875]; 102; 108; 9.731297;
TCTGTGG; 0.36621; 0.15583;
MLANA 1500KB upstream region; USF-1 [T00875]; 351; 357; 5.152973;
TAAGTGG; 0.73242; 0.41833;
MLANA 1500KB upstream region; USF-1 [T00875]; 469; 475; 5.974743;
AACGTGG; 0.36621; 0.23847;
MLANA 1500KB upstream region; USF-1 [T00875]; 1373; 1379; 12.428866;
CCACAAT; 0.36621; 0.23857;
MLANA 1500KB upstream region; LEF-1 [T02905]; 280; 287; 8.011275;

ATGCAAAG; 0.22888; 0.16519;
MLANA 1500KB upstream region; LEF-1 [T02905]; 433; 440; 7.080257;
ATACAAAG; 0.09155; 0.08101;
MLANA 1500KB upstream region; LEF-1 [T02905]; 590; 597; 7.205343;
GCTCAAAG; 0.09155; 0.08101;
MLANA 1500KB upstream region; LEF-1 [T02905]; 692; 699; 8.197478;
CTCCAAAG; 0.22888; 0.16519;
MLANA 1500KB upstream region; LEF-1 [T02905]; 909; 916; 2.021471;
CACCAAAG; 0.13733; 0.10092;
MLANA 1500KB upstream region; LEF-1 [T02905]; 950; 957; 8.197478;
CTCCAAAG; 0.22888; 0.16519;
MLANA 1500KB upstream region; FOXD3 [T02290]; 420; 427; 5.207923;
AAACACCA; 0.18311; 0.12873;
MLANA 1500KB upstream region; FOXD3 [T02290]; 512; 519; 2.983153;
AAACAGTC; 0.04578; 0.04281;
MLANA 1500KB upstream region; FOXD3 [T02290]; 600; 607; 4.001457;
AAACAGAA; 0.11444; 0.10419;
MLANA 1500KB upstream region; FOXD3 [T02290]; 724; 731; 0.000000;
GATTGTTT; 0.09155; 0.11443;
MLANA 1500KB upstream region; FOXD3 [T02290]; 785; 792; 0.461834;
AATTGTTT; 0.09155; 0.11425;
MLANA 1500KB upstream region; FOXD3 [T02290]; 800; 807; 1.875536;
GCTTGTTT; 0.22888; 0.22054;
MLANA 1500KB upstream region; FOXD3 [T02290]; 807; 814; 4.001457;
TTCTGTTT; 0.11444; 0.10419;
MLANA 1500KB upstream region; FOXD3 [T02290]; 834; 841; 0.554200;
CATTGTTT; 0.09155; 0.11425;
MLANA 1500KB upstream region; FOXD3 [T02290]; 1300; 1307; 0.554200;
CATTGTTT; 0.09155; 0.11425;
MLANA 1500KB upstream region; FOXD3 [T02290]; 1460; 1467; 2.429736;
CCTTGTTT; 0.09155; 0.08561;
MLANA 1500KB upstream region; FOXD3 [T04166]; 416; 426; 13.371894;
AAAAAACACC; 0.06008; 0.08496;
MLANA 1500KB upstream region; FOXD3 [T04166]; 1322; 1332; 14.945058;
TTTATTCATTT; 0.06008; 0.06359;
MLANA 1500KB upstream region; FOXD3 [T04166]; 1424; 1434; 10.329655;
TTTGTTAGTAT; 0.00858; 0.00778;
MLANA 1500KB upstream region; FOXD3 [T04166]; 1461; 1471; 14.158476;
CTTGTTTTTTTA; 0.09012; 0.11075;
MLANA 1500KB upstream region; USF-1 [T00877]; 1478; 1488; 14.506027;
TTATTACATGT; 0.10300; 0.08274;
MC1R 1500KB upstream region; POU3F2 [T00630]; 5; 11; 2.272484; AAATATA;
0.27466; 0.41195;
MC1R 1500KB upstream region; POU3F2 [T00630]; 11; 17; 9.978215; AAATTGC;
0.18311; 0.18057;
MC1R 1500KB upstream region; POU3F2 [T00630]; 235; 241; 6.822173;
GGCATTT; 0.54932; 0.52790;
MC1R 1500KB upstream region; POU3F2 [T00630]; 262; 268; 5.963103;
AAATTAT; 0.73242; 0.98415;
MC1R 1500KB upstream region; POU3F2 [T00630]; 302; 308; 5.963103;
AGAATTT; 0.73242; 0.98415;
MC1R 1500KB upstream region; POU3F2 [T00630]; 376; 382; 7.327537;
AAATTCC; 0.91553; 1.19566;
MC1R 1500KB upstream region; POU3F2 [T00630]; 522; 528; 5.457738;

AAATGCT; 0.73242; 0.73821;
MC1R 1500KB upstream region; POU3F2 [T00630]; 613; 619; 2.272484;
AAATATA; 0.27466; 0.41195;
MC1R 1500KB upstream region; POU3F2 [T00630]; 831; 837; 0.505365;
TGTATTT; 0.54932; 0.77377;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1010; 1016; 2.272484;
TAAATTT; 0.27466; 0.41195;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1011; 1017; 7.730221;
AAATTTT; 0.91553; 1.19566;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1024; 1030; 3.156043;
TCTATTT; 0.27466; 0.33133;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1044; 1050; 0.505365;
AAATTCA; 0.54932; 0.77377;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1328; 1334; 7.074855;
GGGATTT; 0.54932; 0.52790;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1399; 1405; 7.327537;
AAATACC; 0.91553; 1.19566;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1418; 1424; 7.074855;
AAATCAC; 0.54932; 0.52790;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1446; 1452; 7.477539;
AAATCTG; 0.91553; 1.19566;
MC1R 1500KB upstream region; POU3F2 [T00630]; 1464; 1470; 5.963103;
CTTATTT; 0.73242; 0.98415;
MC1R 1500KB upstream region; USF-1 [T00875]; 74; 80; 0.031764; CCACCTG;
0.36621; 0.17808;
MC1R 1500KB upstream region; USF-1 [T00875]; 114; 120; 6.006507;
CCACCTT; 0.36621; 0.23847;
MC1R 1500KB upstream region; USF-1 [T00875]; 168; 174; 6.006507;
AAGGTGG; 0.36621; 0.23847;
MC1R 1500KB upstream region; USF-1 [T00875]; 203; 209; 5.121209;
CCACATC; 0.73242; 0.41833;
MC1R 1500KB upstream region; USF-1 [T00875]; 402; 408; 11.607096;
CCACCAC; 1.09863; 0.59829;
MC1R 1500KB upstream region; USF-1 [T00875]; 405; 411; 10.685079;
CCACCCA; 1.09863; 0.49365;
MC1R 1500KB upstream region; USF-1 [T00875]; 514; 520; 9.763061;
TCAGTGG; 0.36621; 0.15632;
MC1R 1500KB upstream region; USF-1 [T00875]; 692; 698; 11.506849;
AGCGTGG; 1.09863; 0.59829;
MC1R 1500KB upstream region; USF-1 [T00875]; 718; 724; 5.563870;
CCACCCG; 0.36621; 0.13403;
MC1R 1500KB upstream region; USF-1 [T00875]; 721; 727; 4.610088;
CCCGTGG; 0.36621; 0.13317;
MC1R 1500KB upstream region; USF-1 [T00875]; 729; 735; 5.974743;
CCACATT; 0.36621; 0.23847;
MC1R 1500KB upstream region; USF-1 [T00875]; 736; 742; 11.607096;
CCACCAC; 1.09863; 0.59829;
MC1R 1500KB upstream region; USF-1 [T00875]; 739; 745; 10.685079;
CCACTCC; 1.09863; 0.49365;
MC1R 1500KB upstream region; USF-1 [T00875]; 744; 750; 6.006507;
CCACCTT; 0.36621; 0.23847;
MC1R 1500KB upstream region; USF-1 [T00875]; 821; 827; 10.616595;
CCACTGT; 1.09863; 0.49365;
MC1R 1500KB upstream region; USF-1 [T00875]; 1101; 1107; 5.152973;

CCACTTC; 0.73242; 0.41833;
MC1R 1500KB upstream region; USF-1 [T00875]; 1206; 1212; 11.607096;
CCACCAC; 1.09863; 0.59829;
MC1R 1500KB upstream region; USF-1 [T00875]; 1209; 1215; 6.006507;
CCACTTT; 0.36621; 0.23847;
MC1R 1500KB upstream region; USF-1 [T00875]; 1251; 1257; 6.454123;
CTTGTGG; 0.36621; 0.17813;
MC1R 1500KB upstream region; USF-1 [T00875]; 1484; 1490; 11.575332;
CCACAAA; 1.09863; 0.59829;
MC1R 1500KB upstream region; Mitf [T01554]; 917; 929; 7.123746;
ATCATCATGTGCA; 0.00595; 0.00327;
MC1R 1500KB upstream region; USF1 [T00874]; 719; 727; 8.313905;
CACCCGTGG; 0.22316; 0.08113;
MC1R 1500KB upstream region; LEF-1 [T02905]; 163; 170; 0.904249;
CAACAAAG; 0.06866; 0.06728;
MC1R 1500KB upstream region; LEF-1 [T02905]; 186; 193; 9.023435;
CTTTGCC; 0.18311; 0.09642;
MC1R 1500KB upstream region; LEF-1 [T02905]; 892; 899; 6.707850;
TTTCAAAG; 0.09155; 0.08561;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1002; 1009; 1.835267;
CTTTGCTG; 0.13733; 0.10092;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1085; 1092; 8.251852;
CTTTGACA; 0.18311; 0.12147;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1155; 1162; 0.372407;
GAACAAAG; 0.09155; 0.08561;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1238; 1245; 1.489628;
GACCAAAG; 0.04578; 0.02752;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1280; 1287; 1.303425;
CTTTGCTC; 0.04578; 0.02752;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1297; 1304; 0.904249;
CTTTGTTG; 0.06866; 0.06728;
MC1R 1500KB upstream region; LEF-1 [T02905]; 1484; 1491; 8.109591;
CCACAAAG; 0.22888; 0.16519;
MC1R 1500KB upstream region; FOXD3 [T02290]; 344; 351; 3.816724;
AAACAGAC; 0.11444; 0.10419;
MC1R 1500KB upstream region; FOXD3 [T02290]; 776; 783; 5.043422;
TCCTGTTT; 0.18311; 0.12873;
MC1R 1500KB upstream region; FOXD3 [T02290]; 867; 874; 2.983153;
GACTGTTT; 0.04578; 0.04281;
MC1R 1500KB upstream region; FOXD3 [T02290]; 1379; 1386; 3.356047;
GAGTGTTT; 0.09155; 0.08583;
MC1R 1500KB upstream region; FOXD3 [T02290]; 1489; 1496; 3.817880;
AAGTGTTT; 0.11444; 0.10419;
MC1R 1500KB upstream region; USF-1 [T00877]; 921; 931; 9.029386;
TCATGTGCATC; 0.05007; 0.02443;
MC1R 1500KB upstream region; USF-1 [T00877]; 1309; 1319; 8.109390;
GCATGTGATCT; 0.02289; 0.01079;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 40; 46; 7.224857;
CACATTT; 0.54932; 0.52790;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 177; 183; 5.457738;
CTCATTT; 0.73242; 0.73821;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 268; 274; 7.327537;
AAATAAC; 0.91553; 1.19566;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 283; 289; 5.710420;

AGGATTT; 0.73242; 0.73821;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 367; 373; 0.252682;
TTGATTT; 0.54932; 0.77377;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 500; 506; 5.963103;
AGAATTT; 0.73242; 0.98415;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 621; 627; 7.327537;
AAATTCC; 0.91553; 1.19566;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 1119; 1125; 5.710420;
CTGATTT; 0.73242; 0.73821;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 1134; 1140; 9.472851;
AAATGGC; 0.18311; 0.13544;
RAB27A 1500KB upstream region; POU3F2 [T00630]; 1477; 1483; 5.710420;
AAATCCT; 0.73242; 0.73821;
RAB27A 1500KB upstream region; USF-1 [T00875]; 19; 25; 0.000000;
CCACGTG; 0.36621; 0.17808;
RAB27A 1500KB upstream region; USF-1 [T00875]; 158; 164; 5.152973;
CCACTTC; 0.73242; 0.41833;
RAB27A 1500KB upstream region; USF-1 [T00875]; 211; 217; 9.731297;
GCTGTGG; 0.36621; 0.15583;
RAB27A 1500KB upstream region; USF-1 [T00875]; 310; 316; 12.460630;
CCACCAT; 0.36621; 0.23857;
RAB27A 1500KB upstream region; USF-1 [T00875]; 392; 398; 9.731297;
CCACAGA; 0.36621; 0.15583;
RAB27A 1500KB upstream region; USF-1 [T00875]; 408; 414; 11.575332;
TTTGTGG; 1.09863; 0.59829;
RAB27A 1500KB upstream region; USF-1 [T00875]; 423; 429; 11.575332;
CCACAAA; 1.09863; 0.59829;
RAB27A 1500KB upstream region; USF-1 [T00875]; 429; 435; 10.584831;
ACCGTGG; 1.09863; 0.49365;
RAB27A 1500KB upstream region; USF-1 [T00875]; 493; 499; 5.121209;
GATGTGG; 0.73242; 0.41833;
RAB27A 1500KB upstream region; USF-1 [T00875]; 517; 523; 5.152973;
GAAGTGG; 0.73242; 0.41833;
RAB27A 1500KB upstream region; USF-1 [T00875]; 639; 645; 0.000000;
CCACATG; 0.36621; 0.17808;
RAB27A 1500KB upstream region; USF-1 [T00875]; 705; 711; 0.000000;
CCACATG; 0.36621; 0.17808;
RAB27A 1500KB upstream region; USF-1 [T00875]; 858; 864; 9.731297;
GCTGTGG; 0.36621; 0.15583;
RAB27A 1500KB upstream region; USF-1 [T00875]; 1072; 1078; 11.538613;
CCACTCT; 1.09863; 0.59829;
RAB27A 1500KB upstream region; USF-1 [T00875]; 1178; 1184; 5.152973;
CCACTTC; 0.73242; 0.41833;
RAB27A 1500KB upstream region; USF-1 [T00875]; 1382; 1388; 10.584831;
CCACGGT; 1.09863; 0.49365;
RAB27A 1500KB upstream region; USF-1 [T00875]; 1400; 1406; 9.763061;
GCAGTGG; 0.36621; 0.15632;
RAB27A 1500KB upstream region; USF-1 [T00875]; 1491; 1497; 10.584831;
ACTGTGG; 1.09863; 0.49365;
RAB27A 1500KB upstream region; USF1 [T00874]; 18; 26; 2.334845;
TCCACGTGC; 0.06294; 0.02694;
RAB27A 1500KB upstream region; USF1 [T00874]; 19; 27; 2.100004;
CCACGTGCA; 0.07439; 0.03130;
RAB27A 1500KB upstream region; USF1 [T00874]; 800; 808; 8.514439;

CTCGCGTGC; 0.22316; 0.08113;
RAB27A 1500KB upstream region; LEF-1 [T02905]; 665; 672; 8.197478;
CTTTGGAA; 0.22888; 0.16519;
RAB27A 1500KB upstream region; LEF-1 [T02905]; 1042; 1049; 7.479433;
CTTTGCAC; 0.16022; 0.10553;
RAB27A 1500KB upstream region; LEF-1 [T02905]; 1049; 1056; 9.226813;
CTTTGGGG; 0.18311; 0.09642;
RAB27A 1500KB upstream region; LEF-1 [T02905]; 1226; 1233; 8.011275;
CTTTGCAG; 0.22888; 0.16519;
RAB27A 1500KB upstream region; LEF-1 [T02905]; 1234; 1241; 0.904249;
CAACAAAG; 0.06866; 0.06728;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 325; 332; 2.337369;
AAACAAGT; 0.09155; 0.08561;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 403; 410; 5.412889;
CCCTGTTT; 0.13733; 0.10109;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 473; 480; 3.540780;
AAACACTA; 0.09155; 0.08583;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 540; 547; 1.851876;
AAACATCA; 0.22888; 0.22054;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 916; 923; 3.816724;
AAACAGAC; 0.11444; 0.10419;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 1095; 1102; 5.023189;
AAACACCC; 0.18311; 0.12873;
RAB27A 1500KB upstream region; FOXD3 [T02290]; 1138; 1145; 4.650295;
GGCTGTTT; 0.13733; 0.12406;
RAB27A 1500KB upstream region; FOXD3 [T04166]; 419; 429; 14.158476;
AAAACCACAAA; 0.09012; 0.11075;
RAB27A 1500KB upstream region; FOXD3 [T04166]; 539; 549; 14.945058;
AAAACATCAAG; 0.06008; 0.06359;
RAB27A 1500KB upstream region; USF-1 [T00877]; 477; 487; 10.883360;
ACTACACATGC; 0.02038; 0.00808;
RAB27A 1500KB upstream region; USF-1 [T00877]; 636; 646; 1.386985;
TTACCACATGG; 0.02003; 0.01279;
RAB27A 1500KB upstream region; USF-1 [T00877]; 702; 712; 8.802883;
TCCCACATGC; 0.05007; 0.02443;
RAB27A 1500KB upstream region; CREB [T00989]; 1081; 1090; 9.084806;
TGACGTATGA; 0.05150; 0.03637;
RAB27A 1500KB upstream region; CREB [T00163]; 1081; 1089; 1.509908;
TGACGTATG; 0.06866; 0.04350;
RAB27A 1500KB upstream region; CREB [T00164]; 1081; 1089; 4.825740;
TGACGTATG; 0.08583; 0.05598;
MITF 1500bp upstream region; POU3F2 [T00630]; 0; 6; 1.767119; AAATGTA;
0.18311; 0.24110;
MITF 1500bp upstream region; POU3F2 [T00630]; 38; 44; 7.477539; AAGATTT;
0.91553; 1.19566;
MITF 1500bp upstream region; POU3F2 [T00630]; 42; 48; 0.505365; TTTATTT;
0.54932; 0.77377;
MITF 1500bp upstream region; POU3F2 [T00630]; 102; 108; 5.963103;
ATTATTT; 0.73242; 0.98415;
MITF 1500bp upstream region; POU3F2 [T00630]; 113; 119; 7.327537;
GGAATTT; 0.91553; 1.19566;
MITF 1500bp upstream region; POU3F2 [T00630]; 148; 154; 5.963103;
AAATAAT; 0.73242; 0.98415;
MITF 1500bp upstream region; POU3F2 [T00630]; 156; 162; 8.108417;

CCCATTT; 0.18311; 0.15867;
MITF 1500bp upstream region; POU3F2 [T00630]; 349; 355; 5.963103;
CTTATTT; 0.73242; 0.98415;
MITF 1500bp upstream region; POU3F2 [T00630]; 356; 362; 7.730221;
AAAATTT; 0.91553; 1.19566;
MITF 1500bp upstream region; POU3F2 [T00630]; 357; 363; 9.094656;
AAATTC; 0.27466; 0.33169;
MITF 1500bp upstream region; POU3F2 [T00630]; 389; 395; 5.963103;
AAATTAT; 0.73242; 0.98415;
MITF 1500bp upstream region; POU3F2 [T00630]; 391; 397; 5.963103;
ATTATTT; 0.73242; 0.98415;
MITF 1500bp upstream region; POU3F2 [T00630]; 432; 438; 1.767119;
TACATTT; 0.18311; 0.24110;
MITF 1500bp upstream region; POU3F2 [T00630]; 451; 457; 8.613781;
AAATTGT; 0.64087; 0.67044;
MITF 1500bp upstream region; POU3F2 [T00630]; 459; 465; 2.650678;
TCCATTT; 0.27466; 0.41195;
MITF 1500bp upstream region; POU3F2 [T00630]; 468; 474; 7.730221;
CATATTT; 0.91553; 1.19566;
MITF 1500bp upstream region; POU3F2 [T00630]; 514; 520; 8.108417;
CCCATTT; 0.18311; 0.15867;
MITF 1500bp upstream region; POU3F2 [T00630]; 550; 556; 5.457738;
AAATGCT; 0.73242; 0.73821;
MITF 1500bp upstream region; POU3F2 [T00630]; 617; 623; 5.457738;
AAATGCT; 0.73242; 0.73821;
MITF 1500bp upstream region; POU3F2 [T00630]; 781; 787; 7.327537;
AAATTC; 0.91553; 1.19566;
MITF 1500bp upstream region; POU3F2 [T00630]; 1041; 1047; 0.505365;
AAATAAA; 0.54932; 0.77377;
MITF 1500bp upstream region; POU3F2 [T00630]; 1074; 1080; 2.019801;
AAATCTA; 0.18311; 0.24110;
MITF 1500bp upstream region; POU3F2 [T00630]; 1105; 1111; 2.272484;
TATATTT; 0.27466; 0.41195;
MITF 1500bp upstream region; POU3F2 [T00630]; 1115; 1121; 2.650678;
TCCATTT; 0.27466; 0.41195;
MITF 1500bp upstream region; POU3F2 [T00630]; 1154; 1160; 5.710420;
AAATCAG; 0.73242; 0.73821;
MITF 1500bp upstream region; POU3F2 [T00630]; 1220; 1226; 0.252682;
AAATCAA; 0.54932; 0.77377;
MITF 1500bp upstream region; POU3F2 [T00630]; 1337; 1343; 0.252682;
AAATCCA; 0.54932; 0.77377;
MITF 1500bp upstream region; POU3F2 [T00630]; 1365; 1371; 6.822173;
GGCATTT; 0.54932; 0.52790;
MITF 1500bp upstream region; POU3F2 [T00630]; 1454; 1460; 7.730221;
AATATTT; 0.91553; 1.19566;
MITF 1500bp upstream region; USF-1 [T00875]; 108; 114; 9.763061;
TCAGTGG; 0.36621; 0.15632;
MITF 1500bp upstream region; USF-1 [T00875]; 835; 841; 9.763061;
CCACTGA; 0.36621; 0.15632;
MITF 1500bp upstream region; USF-1 [T00875]; 882; 888; 9.763061;
CCACTGA; 0.36621; 0.15632;
MITF 1500bp upstream region; USF-1 [T00875]; 1351; 1357; 10.653315;
CCACACC; 1.09863; 0.49365;
MITF 1500bp upstream region; USF-1 [T00875]; 1396; 1402; 5.152973;

CCACTTC; 0.73242; 0.41833;
MITF 1500bp upstream region; Mitf [T01554]; 501; 513; 14.067903;
AGCACCTGACGTG; 0.01502; 0.00638;
MITF 1500bp upstream region; LEF-1 [T02905]; 336; 343; 6.707850;
CTTTGAAA; 0.09155; 0.08561;
MITF 1500bp upstream region; LEF-1 [T02905]; 520; 527; 8.109591;
TCACAAAG; 0.22888; 0.16519;
MITF 1500bp upstream region; LEF-1 [T02905]; 577; 584; 9.209639;
CTTTGGCC; 0.18311; 0.09642;
MITF 1500bp upstream region; LEF-1 [T02905]; 638; 645; 8.624259;
AGACAAAG; 0.18311; 0.12147;
MITF 1500bp upstream region; LEF-1 [T02905]; 946; 953; 7.205343;
CTTTGAGC; 0.09155; 0.08101;
MITF 1500bp upstream region; LEF-1 [T02905]; 1221; 1228; 0.531842;
AATCAAAG; 0.09155; 0.08561;
MITF 1500bp upstream region; LEF-1 [T02905]; 1380; 1387; 8.011275;
TTGCAAAG; 0.22888; 0.16519;
MITF 1500bp upstream region; LEF-1 [T02905]; 1424; 1431; 9.226813;
TCCCAAAG; 0.18311; 0.09642;
MITF 1500bp upstream region; FOXD3 [T02290]; 59; 66; 5.412889; CCCTGTTT;
0.13733; 0.10109;
MITF 1500bp upstream region; FOXD3 [T02290]; 85; 92; 4.835029; TGCTGTTT;
0.18311; 0.12873;
MITF 1500bp upstream region; FOXD3 [T02290]; 137; 144; 0.184733;
AAACATTA; 0.09155; 0.11443;
MITF 1500bp upstream region; FOXD3 [T02290]; 452; 459; 0.461834;
AATTGTTT; 0.09155; 0.11425;
MITF 1500bp upstream region; FOXD3 [T02290]; 557; 564; 2.060269;
TCTTGTTT; 0.22888; 0.22054;
MITF 1500bp upstream region; FOXD3 [T02290]; 1318; 1325; 4.370924;
AAACAGAG; 0.13733; 0.12406;
MITF 1500bp upstream region; FOXD3 [T02290]; 1484; 1491; 5.207923;
TGGTGTTT; 0.18311; 0.12873;
MITF 1500bp upstream region; FOXD3 [T04166]; 126; 136; 14.158476;
GAAAGAACAAT; 0.09012; 0.11075;
MITF 1500bp upstream region; FOXD3 [T04166]; 1169; 1179; 13.371894;
AAAAAAGAAA; 0.06008; 0.08496;
MITF 1500bp upstream region; USF-1 [T00877]; 1403; 1413; 2.080477;
CTAGCACATGC; 0.02003; 0.01131;
MITF 1500bp upstream region; CREB [T00989]; 507; 516; 10.487463;
TGACGTGCCC; 0.07725; 0.03337;
MITF 1500bp upstream region; CREB [T00163]; 507; 515; 2.041286;
TGACGTGCC; 0.13733; 0.07620;
MITF 1500bp upstream region; CREB [T00164]; 507; 515; 5.639863;
TGACGTGCC; 0.09727; 0.05069;
OAl 1500KB upstream region; POU3F2 [T00630]; 156; 162; 9.978215;
GCAATTT; 0.18311; 0.18057;
OAl 1500KB upstream region; POU3F2 [T00630]; 164; 170; 8.613781;
AAATTGT; 0.64087; 0.67044;
OAl 1500KB upstream region; POU3F2 [T00630]; 357; 363; 0.252682;
TGGATTT; 0.54932; 0.77377;
OAl 1500KB upstream region; POU3F2 [T00630]; 608; 614; 8.841973;
AAATCTC; 0.27466; 0.33169;
OAl 1500KB upstream region; POU3F2 [T00630]; 645; 651; 5.710420;

AGGATTT; 0.73242; 0.73821;
OA1 1500KB upstream region; POU3F2 [T00630]; 719; 725; 8.613781;
CCAATTT; 0.64087; 0.67044;
OA1 1500KB upstream region; POU3F2 [T00630]; 961; 967; 8.361098;
ACGATTT; 0.64087; 0.67044;
OA1 1500KB upstream region; USF-1 [T00875]; 207; 213; 10.653315;
CCACACA; 1.09863; 0.49365;
OA1 1500KB upstream region; USF-1 [T00875]; 296; 302; 6.485888; CCACTAG;
0.36621; 0.17813;
OA1 1500KB upstream region; USF-1 [T00875]; 373; 379; 5.121209; GATGTGG;
0.73242; 0.41833;
OA1 1500KB upstream region; USF-1 [T00875]; 486; 492; 11.607096;
TTAGTGG; 1.09863; 0.59829;
OA1 1500KB upstream region; USF-1 [T00875]; 564; 570; 10.653315;
GGCGTGG; 1.09863; 0.49365;
OA1 1500KB upstream region; USF-1 [T00875]; 630; 636; 0.000000; CCACGTG;
0.36621; 0.17808;
OA1 1500KB upstream region; USF-1 [T00875]; 839; 845; 5.563870; CCACCCG;
0.36621; 0.13403;
OA1 1500KB upstream region; USF-1 [T00875]; 1354; 1360; 5.152973;
CCACTTC; 0.73242; 0.41833;
OA1 1500KB upstream region; USF-1 [T00875]; 1362; 1368; 0.000000;
CCACATG; 0.36621; 0.17808;
OA1 1500KB upstream region; USF-1 [T00875]; 1466; 1472; 10.685079;
CCACCCC; 1.09863; 0.49365;
OA1 1500KB upstream region; Mitf [T01554]; 1361; 1373; 6.507668;
GCCACATGATCCG; 0.00460; 0.00262;
OA1 1500KB upstream region; USF1 [T00874]; 629; 637; 1.761227;
ACCACGTGC; 0.07439; 0.03130;
OA1 1500KB upstream region; USF1 [T00874]; 630; 638; 2.100004;
CCACGTGCA; 0.07439; 0.03130;
OA1 1500KB upstream region; USF1 [T00874]; 913; 921; 8.890372;
ACACGCGGT; 0.21744; 0.07993;
OA1 1500KB upstream region; USF1 [T00874]; 1377; 1385; 7.441259;
GCCGCGTGA; 0.13161; 0.04401;
OA1 1500KB upstream region; LEF-1 [T02905]; 387; 394; 7.665637;
GTCCAAAG; 0.16022; 0.10553;
OA1 1500KB upstream region; LEF-1 [T02905]; 473; 480; 7.205343;
CTTTGAGC; 0.09155; 0.08101;
OA1 1500KB upstream region; LEF-1 [T02905]; 1416; 1423; 6.548415;
GTACAAAG; 0.09155; 0.08561;
OA1 1500KB upstream region; FOXD3 [T02290]; 138; 145; 3.910247;
CAGTGTTT; 0.11444; 0.10419;
OA1 1500KB upstream region; FOXD3 [T02290]; 236; 243; 3.910247;
AAACACTG; 0.11444; 0.10419;
OA1 1500KB upstream region; FOXD3 [T02290]; 575; 582; 5.112129;
AGCTGTTT; 0.18311; 0.12873;
OA1 1500KB upstream region; FOXD3 [T02290]; 604; 611; 1.295405;
AAACAAAT; 0.13733; 0.15122;
OA1 1500KB upstream region; FOXD3 [T02290]; 676; 683; 4.651452;
AAACACAT; 0.13733; 0.12406;
OA1 1500KB upstream region; FOXD3 [T04166]; 984; 994; 13.371894;
AAAAAAAAAAAA; 0.06008; 0.08496;
OA1 1500KB upstream region; FOXD3 [T04166]; 985; 995; 14.158476;

AAAAAAAAAAG; 0.09012; 0.11075;
OA1 1500KB upstream region; USF-1 [T00877]; 372; 382; 14.506027;
AGATGTGGTAT; 0.10300; 0.08274;
OA1 1500KB upstream region; USF-1 [T00877]; 1359; 1369; 7.415898;
TCGCCACATGA; 0.03147; 0.01802;
PMEL 1500KB upstream region; POU3F2 [T00630]; 176; 182; 9.472851;
AAATGGC; 0.18311; 0.13544;
PMEL 1500KB upstream region; POU3F2 [T00630]; 221; 227; 0.252682;
AAATCAA; 0.54932; 0.77377;
PMEL 1500KB upstream region; POU3F2 [T00630]; 305; 311; 5.963103;
AGAATTT; 0.73242; 0.98415;
PMEL 1500KB upstream region; POU3F2 [T00630]; 762; 768; 7.730221;
AATATTT; 0.91553; 1.19566;
PMEL 1500KB upstream region; POU3F2 [T00630]; 798; 804; 5.963103;
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PMEL 1500KB upstream region; POU3F2 [T00630]; 800; 806; 5.963103;
ATTATTT; 0.73242; 0.98415;
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AAATGTA; 0.18311; 0.24110;
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ATTATTT; 0.73242; 0.98415;
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TTGATTT; 0.54932; 0.77377;
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CCAATTT; 0.64087; 0.67044;
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GAGATTT; 0.27466; 0.33169;
PMEL 1500KB upstream region; POU3F2 [T00630]; 1080; 1086; 8.108417;
AAATGGT; 0.18311; 0.15867;
PMEL 1500KB upstream region; POU3F2 [T00630]; 1173; 1179; 5.963103;
AGAATTT; 0.73242; 0.98415;
PMEL 1500KB upstream region; POU3F2 [T00630]; 1342; 1348; 2.019801;
AAATCTA; 0.18311; 0.24110;
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AAATTCT; 0.73242; 0.98415;
PMEL 1500KB upstream region; POU3F2 [T00630]; 1428; 1434; 9.472851;
GCCATTT; 0.18311; 0.13544;
PMEL 1500KB upstream region; POU3F2 [T00630]; 1453; 1459; 9.472851;
AAATGGC; 0.18311; 0.13544;
PMEL 1500KB upstream region; USF-1 [T00875]; 1; 7; 11.575332; TTTGTGG;
1.09863; 0.59829;
PMEL 1500KB upstream region; USF-1 [T00875]; 133; 139; 9.731297;
GCTGTGG; 0.36621; 0.15583;
PMEL 1500KB upstream region; USF-1 [T00875]; 141; 147; 6.006507;
AAAGTGG; 0.36621; 0.23847;
PMEL 1500KB upstream region; USF-1 [T00875]; 159; 165; 11.607096;
TTGGTGG; 1.09863; 0.59829;
PMEL 1500KB upstream region; USF-1 [T00875]; 162; 168; 11.607096;
GTGGTGG; 1.09863; 0.59829;
PMEL 1500KB upstream region; USF-1 [T00875]; 366; 372; 10.653315;
TGCGTGG; 1.09863; 0.49365;
PMEL 1500KB upstream region; USF-1 [T00875]; 721; 727; 5.121209;

CCACATC; 0.73242; 0.41833;
PMEL 1500KB upstream region; USF-1 [T00875]; 816; 822; 10.685079;
GGAGTGG; 1.09863; 0.49365;
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ATTGTGG; 0.36621; 0.23857;
PMEL 1500KB upstream region; USF-1 [T00875]; 1186; 1192; 11.538613;
CCACCCT; 1.09863; 0.59829;
PMEL 1500KB upstream region; USF-1 [T00875]; 1199; 1205; 5.152973;
CCACTTC; 0.73242; 0.41833;
PMEL 1500KB upstream region; USF-1 [T00875]; 1275; 1281; 6.485888;
CCACCAG; 0.36621; 0.17813;
PMEL 1500KB upstream region; USF-1 [T00875]; 1358; 1364; 5.152973;
GAGGTGG; 0.73242; 0.41833;
PMEL 1500KB upstream region; USF-1 [T00875]; 1445; 1451; 10.653315;
CCACACA; 1.09863; 0.49365;
PMEL 1500KB upstream region; Mitf [T01554]; 1306; 1318; 8.542309;
TTGCTCATGTGCA; 0.00706; 0.00394;
PMEL 1500KB upstream region; LEF-1 [T02905]; 90; 97; 9.226813; CCCCAAAG;
0.18311; 0.09642;
PMEL 1500KB upstream region; LEF-1 [T02905]; 137; 144; 9.555277;
TGGCAAAG; 0.13733; 0.07565;
PMEL 1500KB upstream region; LEF-1 [T02905]; 890; 897; 8.092417;
CTTTGTCC; 0.22888; 0.16519;
PMEL 1500KB upstream region; LEF-1 [T02905]; 998; 1005; 9.555277;
CTTTGCCT; 0.13733; 0.07565;
PMEL 1500KB upstream region; LEF-1 [T02905]; 1007; 1014; 8.251852;
CTTTGACT; 0.18311; 0.12147;
PMEL 1500KB upstream region; LEF-1 [T02905]; 1047; 1054; 6.707850;
TTTCAAAG; 0.09155; 0.08561;
PMEL 1500KB upstream region; LEF-1 [T02905]; 1154; 1161; 8.197478;
CTTTGGAA; 0.22888; 0.16519;
PMEL 1500KB upstream region; FOXD3 [T02290]; 80; 87; 1.018305; TTTTGT
TTT; 0.09155; 0.11446;
PMEL 1500KB upstream region; FOXD3 [T02290]; 151; 158; 4.278557;
ATCTGTTT; 0.13733; 0.12406;
PMEL 1500KB upstream region; FOXD3 [T02290]; 336; 343; 3.910247;
CAGTGTTT; 0.11444; 0.10419;
PMEL 1500KB upstream region; FOXD3 [T02290]; 748; 755; 4.743818;
AAACACAG; 0.13733; 0.12406;
PMEL 1500KB upstream region; FOXD3 [T02290]; 1120; 1127; 5.043422;
TCCTGTTT; 0.18311; 0.12873;
PMEL 1500KB upstream region; FOXD3 [T02290]; 1231; 1238; 4.001457;
TTCTGTTT; 0.11444; 0.10419;
PMEL 1500KB upstream region; FOXD3 [T04166]; 974; 984; 13.371894;
ATTTTTGATTT; 0.06008; 0.08496;
PMEL 1500KB upstream region; USF-1 [T00877]; 1310; 1320; 9.496375;
TCATGTGCAGT; 0.04506; 0.01972;
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GGCTCACATGG; 0.02038; 0.00808;

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>MITF-promoter-1500bpUpstream-pos23041-24540

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>TYR-promoter-1500bpUpstream-pos19738-21237 (reverse complemented)

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>RAB27A 1500KB upstream region

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>MLANA 1500KB upstream region

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>DCT 1500KB upstream region

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>AIM1 1500KB upstream region

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TGTCTTTTTCATATGGTTTCTTATTTATTTATATCAAAATTTATATAGCCGCCAGTTC
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CCTTGCAAAACTGTTGATCATTCTGCTCCATCAGAAAAGAAACAACAACCCTTATTACT
GCCTTGCAATTTATATCCTCGGATCAGTCGAGTCTCTCCCTTCTCGGGTAACACGCAGTA
TGAAGGGGAGCTGGAGTGGCAGTCAATTTTCTGCTTCAAGACCACGAAGTGGCAGCCCTT
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CREB

>Python-bivittatus gi|602656083|ref|XP_007433779.1| PREDICTED: cyclic AMP-responsive element-binding protein_1 isoform X1 [Python bivittatus]
MTMESGADNQQSGDAAVTEAENQQMTVPAQPQIATLAQVSM PAAHATSSAPT VTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEE
KSEEEATAPAITTVTVPTPIYQTSSGQYRTGVADIHHQYGN AVHAVAITQGGAIQLANNGTDGVQGLQTL
TMTNAAATQPGTTILQYAQT TDGQQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMAS SPALPTQ
PAEEAARKREVRLMKNREAAARECRRKKKEYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Homo-sapiens gi|4758054|ref|NP_004370.1| cyclic AMP-responsive element-binding protein 1 isoform A [Homo sapiens]
MTMESGAENQQSGDAAVTEAENQQMTVQAQPQIATLAQVSM PAAHATSSAPT VTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEE
KSEETSAPAITTVTVPTPIYQTSSGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQY
AQT TDGQQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMAS SPALPTQPAEEAARKREVRLMKNR
EAARECRRKKKEYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Mus-musculus gi|82546874|ref|NP_598589.2| cyclic AMP-responsive element-binding protein 1 isoform A [Mus musculus]
MTMESGADNQQSGDAAVTEAENQQMTVQAQPQIATLAQVSM PAAHATSSAPT VTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEE
KSEETSAPAITTVTVPTPIYQTSSGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQY
AQT TDGQQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMAS SPALPTQPAEEAARKREVRLMKNR
EAARECRRKKKEYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Gallus-gallus gi|45383261|ref|NP_989781.1| cyclic AMP-responsive element-binding protein 1 [Gallus gallus]
MTMESGAENQQSGDAAVTEAETQQMTVQAQPQIATLAQVSM PAAHATSSAPT VTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEE
KSEETAAPAIATVTVPTPIYQTSSGQYIAITQGGAIQLSNNGT DGVQGLQTLTMTNAAATQPGTTILQY
AQT TDGQQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMAS SPALPTQPAEEAARKREVRLMKNR
EAARECRRKKKEYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Ophiophagus-hannah_PARTIAL gi|565320082|gb|ETE71081.1| Cyclic AMP-responsive element-binding protein 1, partial [Ophiophagus hannah]
MESGAENQQSGDAAVTEAENQQMTVQAQPQIATLAQVSM PAAHATSSAPT VTLVQLPNGQTVQVHGVIQT
AQPSVIQSPQVQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEEKS
EEEATAPAITTVTVPTPIYQTSSGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQYAQ
TTD GQQILVPSNQVLLQEMFRPTKFALHPQAPLHLVSSWHL PQLFPLNQKKQHEKEKEAARECRRKKK
EYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Anolis-carolinensis gi|637343695|ref|XP_008116978.1| PREDICTED: cyclic AMP-responsive element-binding protein 1 [Anolis carolinensis]
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VQTVQISTIAESED SQESVDSVTD SQKRREILSRRPSYRKILNDLSSDAPGVPRIEEEEKSEEEAAPAIT
TVTVPTPIYQTSSGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQYAQT TDGQQILV
SNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMAS SPALPTQPAEEAARKREVRLMKNREAAARECRRKKK
EYVKCLENRVAVLENQNKT LIEELKALKDLYCHKSD

>Alligator-sinensis gi|557293412|ref|XP_006029184.1| PREDICTED: cyclic AMP-responsive element-binding protein 1 [Alligator sinensis]
MTMESGAENQQSGDAAVTEAETQQMTVQAQPQIATLAQVSMPPAAHATSSAPTVTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESEDSDQESVDSVTDSDQKRREILSRRPSYRKILNDLSSDAPGVPRIEEE
KSEETSAPAITTVTVPTPIYQTSYGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQY
AQTTDGGQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMASPPALPTQPAEEAARKREVRLMKNR
EAARECRRKKKEYVKCLENRVAVLENQNKTLIEELKALKDLYCHKSD

>Canis-familiaris gi|928182529|ref|XP_013966467.1| PREDICTED: cyclic AMP-responsive element-binding protein 1 isoform X2 [Canis lupus familiaris]
MTMESGAENQQSGDAAVTEAENQQMTVQAQPQIATLAQVSMPPAAHATSSAPTVTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQISTIAESEDSDQESVDSVTDSDQKRREILSRRPSYRKILNDLSSDAPGVPRIEEE
KSEETSAPAITTVTVPTPIYQTSYGQYIAITQGGAIQLANNGTDGVQGLQTLTMTNAAATQPGTTILQY
AQTTDGGQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMASPPALPTQPAEEAARKREVRLMKNR
EAARECRRKKKEYVKCLENRVAVLENQNKTLIEELKALKDLYCHKSD

>Equus-caballus gi|149755007|ref|XP_001505170.1| PREDICTED: cyclic AMP-responsive element-binding protein 1 isoform X2 [Equus caballus]
MTMESGAENQQSGDAAVTEAENQQMTVQAQPQIATLAQVSMPPAAHATSSAPTVTLVQLPNGQTVQVHGVI
QAAQPSVIQSPQVQTVQSSCKDLKRLFSGTQISTIAESEDSDQESVDSVTDSDQKRREILSRRPSYRKILND
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NAAATQPATTILQYAQTDDGGQILVPSNQVVVQAASGDVQTYQIRTAPTSTIAPGVVMASPPALPTQPAE
EAARKREVRLMKNREAARECRRKKKEYVKCLENRVAVLENQNKTLIEELKALKDLYCHKSD

LEF1

>Python-bivittatus gi|602628890|ref|XP_007421376.1| PREDICTED: lymphoid enhancer-binding factor 1 [Python bivittatus]
MPQLSGGGGGPELPCATDEMIPFKDEGDPQKETIFAEISHPEEEGDLADIKSSLVNESEIIPNSNGHGHEV
SRPGQSQEAYEKGREHPEEGKHTDGVLYNKGPSYSGYSYIMPMNMNDPYMSNGSLSPPIPRTSNKVPV
VQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDSDVNTKQGMTRHPPGPDSTFYPLSPGSGVQITPPLGWQ
GQPVYISGGFRQFPSSLSVDTSMSRFSHMIIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVKP
QHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARK
ERQLHMQLYPGWSARDNYGKKKKRKREKLQESTSGTAPRMTAAYI

>Mus-musculus gi|27735019|ref|NP_034833.2| lymphoid enhancer-binding factor 1 isoform a [Mus musculus]
MPQLSGGGGGGGPELPCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGHEV
VRQAPSSQEPYHDKAREHPDEGKHPDGLYNGKPSYSSYSGYIMPMNMNSDPYMSNGSLSPPIPRTSNKV
PVVQPSHAVHPLTPLITYSDEHFSPGSHPSHLPDSDVNSKQGMSRHPPEIPTYPLSPGGVQITPPIG
WQQQPVPYITGGFRQFPSSLSGDTSMSRFSHMIIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHV
KPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELA
RKERQLHMQLYPGWSARDNYGKKKKRKREKLQESTSGTGPRMTAAYI

>Ophiophagus-hannah_PARTIAL gi|565315274|gb|ETE67199.1| Lymphoid enhancer-binding factor 1, partial [Ophiophagus hannah]
MARCEHQYSVFDTRARFTVYAAQALDIRSSNKVPVQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDSDV
STKQGMNRHPPGPDISTFYPLSPGSGVQITPPLGWQGPVYISGGFRHPYSSLSVDTSMSRFSHMIIP
GPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANWH
ALSREEQAKYYELARKERQLHMQLYPGWSARDNYSSSLILFFHFPELPI SLHEKYLNAMKSANLGSVAG

LYCAGNTTIVTELYLGCRWYGFYYLPVFFHKIYYGGKKFLNFMSLPYENSLELEI

>Gallus-gallus gi|45384346|ref|NP_990344.1| lymphoid enhancer-binding factor 1 [Gallus gallus]
MPQLPGAGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIAPGSGGHE
VSRQTPAQDSYHDKGREHPPEGKHPDGGLYSKGPSYSGYSYIMPMNMNDPYMPNGSLSPPIPRTSNKV
PVVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVSSKQGMRSRHPAPDIPTFYPLSPGGVGQITPPLG
WFSHMIIPGPPGPHTTGIPHPAIVTPQVKQEHPHNDSELMHVKQPQHEQRKEQEPKRPHIKKPLNAFMLYM
KEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKR
EKLQESASGTGPRMTAAYI

>Homo-sapiens gi|29792286|gb|AAH50632.1| Lymphoid enhancer-binding factor 1 [Homo sapiens]
MPQLSGGGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGH
EVARQAQTSQEPYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMPMNMNDPYMNSGSLSPPIPRTSN
KVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMRSRHPAPDIPTFYPLSPGGVGQITPP
LGWQGGPVYPIITGGFRQPYPSSLSVDTSMSRFSHHMIIPGPPGPHTTGIPHPAIVTPQVKQEHPHNDSDLM
HVKQPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYE
LARKERQLHMQLYPGWSARDNYGKKKKRKRREKLQESASGTGPRMTAAYI

> Alligator-sinensis gi|557297798|ref|XP_006031200.1| PREDICTED: lymphoid enhancer-binding factor 1 isoform X1 [Alligator sinensis]
MMPNMNDPYMNSGSLSPPIPRTSNKVVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHMPSDVNSKQGM
SRHPAPDIPTFYPLSPGGVGQITPPLGWQGGPVYPISSGFRQPYPSSLSVDPSMSRFSHHMIIPGPPGPH
TGIPHPAIVTPQVKQEHPHNDSELMHVKQPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKE
SAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRREKLQESASGGKRNTF
STCKTKAATPGPLLEMEAC

>Canis-familiaris gi|74002121|ref|XP_863402.1| PREDICTED: lymphoid enhancer-binding factor 1 isoform X3 [Canis lupus familiaris]
MPQLSGAGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPPTSNG
HEVARQAQTSQESYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMPMNMNDPYMNSGSLSPPIPRTS
NKVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHLPDVSNSKQGMRSRHPAPEIPTFYPLSPGGVGQITP
PLGWFSHMIIPGPPGPHTTGIPHPAIVTPQVKQEHPHNDSDLMHVKQPQHEQRKEQEPKRPHIKKPLNAFM
LYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKK
RKREKLQESTSGGKRNSFPTCKAKAATPGPLLEMEAC

>Thamnophis-sirtalis gi|927194465|ref|XP_013930427.1| PREDICTED: lymphoid enhancer-binding factor 1 isoform X1 [Thamnophis sirtalis]
MPQLSGGGGGDPELCATDEMIPFKDEGDPQKETIFAEISHPEEEGDLADIKSSLVNESETIPSSNGHEVSR
QQQSQEVYEKSREHPPEGKHIDGVLYNKGPYSGYSYIMPMNMNDPYMNSGSLSPPIPRTSNKVVPVVQP
SHAVHPLTPLITYSDEHFSPGTHPSHLPDVSNTKQGMNRHPPGPDISTFYPLSPGSGVQITPPLGWFSH
MIIPGPPGPHTTGIPHPAIVTPQVKQEHPHNDSDLMHVKQPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRA
NVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKRREKLQE
STSGIFMGTAPRMTAAYI

> Anolis-carolinensis gi|327283645|ref|XP_003226551.1| PREDICTED: lymphoid enhancer-binding factor 1 isoform X2 [Anolis carolinensis]
MPQLSGGGGGGGGGGGDPELCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESETIS
SSNGHEVSRQGGQPEIYHDKGREHPPEGKHTDGGLYGKGPSYSGYSYIMPMNMNDPYMNSGSLSPPIPR
RTSNKVVPVVQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDVSNSKQGMRSRHPGPDMPFYPLSPGSGVQ

ITPPLGWQGQPVYPISSGFRQPYPSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPHD
SDLMHVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQA
KYYELARKERQLHMQLYPGWSARDNYGKKKKRKRKREKLQESTSGAAPRMTAAYI

>Equus-caballus gi|545210283|ref|XP_005607957.1| PREDICTED: lymphoid
enhancer-binding factor 1 isoform X3 [Equus caballus]
MVARQAQTSQEPYHDKAREHPDDGKHPDGGLYSKGPSYSSYSGYIMPMNNSDPYMSNGSLSPPIPRTSN
KVPVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMRSRHPPEIIPAFYPLSPGGVQITPP
LGWQGQPVYPLTGGLRQPYPSSLSVDTPMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPHADSDLM
HVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYE
LARKERQLHMQLYPGWSARDNYGKKKKRKRKREKLQESTSGGKRSSFPTCKAKAATPGPLLEMEAC

FOXD3

>Python-bivittatus gi|602628796|ref|XP_007421330.1| PREDICTED: forkhead
box protein D3 [Python bivittatus]
MTLSGSLASDMSGQTVLTAEDVDIDVVGEGDEGAEEGGGGPERGAPAAPPAAGWAAAAAPAAAAASSG
GKPKSSLVKPPYSYIALITMAILQSPQKLTLSGICEFISNRFPPYREKFPWQNSIRHNLSLNDCFKI
PREPGNPGKGNWTLDPQSEDMFDNGSFLRRRKRFRKHQQEQLREQTALMMHSFGAYSLAAGPAASSAA
SAQTFLRPPVTAQSGLLAHQPLSLARSTAAIAPILSVPTNILSGQFLQPAASAATVQAKWPAQ

>Homo-sapiens gi|6912372|ref|NP_036315.1| forkhead box protein D3 [Homo
sapiens]
MTLSGGGSASDMSGQTVLTAEDVDIDVVGEGDDGLEEKDS DAGCDSPAGPELRLDEADEVPPAAPHGQ
PQPPHQPLTLPKEAAGAGAGPGGDVGAPEADGCKGGVGGEEGGASGGGPGAGSGSAGGLAPSKPKNSLV
KPPYSYIALITMAILQSPQKLTLSGICEFISNRFPPYREKFPWQNSIRHNLSLNDCFKI PREPGNPG
KGNWTLDPQSEDMFDNGSFLRRRKRFRKHQQEHLREQTALMMQSFAYSLAAAAGAAGPYGRPYGLHPA
AAAGAYSHPAAAAAAAAAALQYPYALPPVAPVLPVAVPLLPSELGRKAAAFGSQGLPGLQLQLNSLGA
AAAAAGTAGAAGTTASLIKSEPSARPSFSIENI IGGGPAAPGGS AVGAGVAGGTGGSGGGSTAQSFLRPP
GTVQSAALMATHQPLSLSRTTATIAPILSVPLSGQFLQPAASAAAAAAAAAQAKWPAQ

>Gallus-gallus gi|45384420|ref|NP_990282.1| forkhead box protein D3
[Gallus gallus]
MTLSGGGSASDMSGQTAALAAEDVDIDVVGEGDDAPGKDGGEARS PAALPLPLDEAAEPGE PERARRAAAA
RQPGPGRPEGGRGGGGGGGGGEGASGGGAAAAAAGQSKPKSSLVKPPYSYIALITMAILQSPQKLTLS
SGICEFISNRFPPYREKFPWQNSIRHNLSLNDCFKI PREPGNPGKGNWTLDPQSEDMFDNGSFLRRR
KRFRKHQQEHLRDTALMMQGFAYGLAGPYGRPYGLPPGAYPHPAALQYPYIPVPGMPLPPACPLPSG
ELSRKAFNAQLGPSLQLQLSSSLGAAGSIVKSEPSRPSFSIENI IGGPAASSAPSAQTFLRPPVTVQSGL
VAHQPLALARTTAAIAPILSVPTNIIAGQFLQPPAAVQAKWPAQ

>Canis-familiaris gi|345800141|ref|XP_003434654.1| PREDICTED: forkhead
box protein D3 [Canis lupus familiaris]
MTLSGGGSASDMSGQTVLTAEDVDIDVVGEGDDGLEEKDS DAGCDSPVGPPELRLDEADEVTPAAPLHGQ
PQPPHQPLALPKEATGAGAGPGGEAGAPEADGCKGGVGGEEGGGSGGGGPGAGGGAAGGLAPSKPKNSL
VKPPYSYIALITMAILQSPQKLTLSGICEFISNRFPPYREKFPWQNSIRHNLSLNDCFKI PREPGNP
GKGNWTLDPQSEDMFDNGSFLRRRKRFRKHQQEHLREQTALMMQSFAYSLAAAAGAAGPYGRPYGLHP
AAAAGAYSHPAAAAAAAAAALQYPYAVPPVAVLPVAVPLLPSELGRKAAAFGSQGLPGLQLQLNSLG
AAAAAGTAGAAGTTASLIKSEPSAWPSFSIENI IGGGPRGARGLRQRAAGGPGGRADGRDRGPGGGPRR
PLHSWSARPAPGPAPLPNPGCLLSSISSPPSPTPQHRPSAASTPSRTPRLAEQTRRPPARPPGIAFRTGF
RKAKE

>Thamnophis-sirtalis gi|927119627|ref|XP_013931405.1| PREDICTED: forkhead box protein D3 [Thamnophis sirtalis]
MTLSGNLSANDMSGQTVLTAEDVDIDVVGEEDDCLEDSGSSSSSSSLGGSPVEEKGSEEGSAPGAPSGAAAA
AGAAAAASSGGKPKSSLVKPPYSYIALITMAILQSPQKKLTLGICEFISNRFPPYYREKFPWQNSIRHN
LSLNDCFVKIPREPGNPGKGNWTLDPQSEDMFDNGSFLRRRKRFRKRHQEQQLREQTALMMHSFGAYSLA
AAAAAAAASSSGPYGRAYGLHHGAYPHPAALQYPYIPVGPMLPPAVPLLPSELRSKAFNAQLSPSLQL
HLSGLGAVTGS GPAAGGVKAEPGRPSFSIENIIGAGAPAVSSSSAVSAQTFLRTPVTAQSGLLAHQPL
SLARTTAAIAPILSVPTNILSGQLQPAASAGAVQAKWPAQ

>Anolis-carolinensis gi|637293528|ref|XP_008107538.1| PREDICTED: forkhead box protein D3 [Anolis carolinensis]
MTLSGSLASDMSGQTVLTAEDVDIDVVGDEGDEAGTEEEARDGAGGLLEGPLPMPLPSQPPCLEEEAPE
AKQPAGEEGEKGAAGEDGAGSASSSSSSSSSSSSSSAASKPKSSLVKPPYSYIALITMAILQSPQKKLTLG
ICEFISGRFPYYREKFPWQNSIRHNLSLNDCFVKIPREPGNPGKGNWTLDPQSEDMFDNGSFLRRRKR
FRKRHQEQQLREQTALMMHSFGAYSLAAAAA AVAGGGGSPYGRAYGAYAHPAAVPYPIPPVGPMLPPAV
PLLPASGAELSRKAFNAQLGLQLSGLGSGPIKAEPSSRPSFSIENIIGGVGAAAAAAAAAASSSSTPA
SSSSISQTFLRPPVSVQSSLLAHQPLSLSRSTAAIGPLLSVPTNLLSGQLFPPSAKWPAQ

>Chrysemys-picta-bellii gi|530581942|ref|XP_005284821.1| PREDICTED:
forkhead box protein D3 [Chrysemys picta bellii]
MTLSGSSSTSDMSGQTVLTAEDVDIDVVGEGDEGLEKSDSDEASSPAGLHLEEAEEELLLPKEAGAGGERS
GGSPAEATPSGAADGGQGRQRKPKNSLVKPPYSYIALITMAILQSPQKKLTLGICEFISNRFPPYYRE
KFPWQNSIRHNLSLNDCFVKIPREPGNPGKGNWTLDPQSEDMFDNGSFLRRRKRFRKRHQEQHLREQTA
LMMQSFAYSLASPYGRPYGLHPGAYPHPAALQYPYIPVGPMLPPAVPLLPSELRSKAFNSQLSPS
LQLQLNSLSAASSLIKSEPSRPSFSIENIIGVSATSSGSSAQTFLRPPVTVQSALMAHQPLSLTRTTAA
IAPILSVPTNIISGQLQPAASAAAVQAKWPAQ

POU3F2

>Python-bivittatus gi|602631326|ref|XP_007422568.1| PREDICTED: POU domain, class 3, transcription factor 2 [Python bivittatus]
MDGSILAKHAFDLRKASSALSETKRSIWESWVGGSPPPPPHHHHEAHSDEDTPTSDDLQFAKQFKQRR
IKLGFQTADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLPLLNKWLEEADSSSGSPTSIDKIAAQ
GRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGALPG
AEDVYGASRDTPPHHGVTQTPVQ

>Alligator-sinensis gi|557270480|ref|XP_006020515.1| PREDICTED: POU domain, class 3, transcription factor 2, partial [Alligator sinensis]
HAHHPHEPHSDEDTPTSDDLQFAKQFKQRRIKLGFQTADVGLALGTLYGNVFSQTTICRFEALQLSFKN
MCKLPLLNKWLEEADSSSGSPTSIDKIAAQGRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADS
LQLEKEVVRVWFCNRRQKEKRMTPPGGTLPGAEDVYGASRDTPPHHGVTQTPVQ

>Canis-familiaris gi|928150842|ref|XP_013973738.1| PREDICTED: POU domain, class 3, transcription factor 2 [Canis lupus familiaris]
MQDQERSNGGGDGSPWSTSPGQPDIKPSVVVQGGRGDELHGPALQQQHQQQQQQQQQQQQQQQQ
QQQRPPHLVHHAANHHHPGPAWRSAAAAAHLPPSMGASNGGLLYSQPSFTVNGMLGAGGQPAGLHHHGLR
DAHDEPHHADHHPHSHPHQPPPPPPPPQPPGHPGAHHDPHSDEDTPTSDDLQFAKQFKQRRIKLGF
TQADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLPLLNKWLEEADSSSGSPTSIDKIAAQGRKRK
RRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGTLPGAEDVY
GSRDTPPHHGVTQTPVQ

>Thamnophis-sirtalis gi|927123025|ref|XP_013907311.1| PREDICTED: POU domain, class 3, transcription factor 2 [Thamnophis sirtalis]
MATTASNHYSLLTSSSPMVHAEPGSMQPGAGYRDAQALVQADYALQSNHGPLSHAHQWITALSHGGGGG
GGGGGGGGGGGGGGGGGGGDSFWSPPLGQQDIKPSVVQAGGRGDELQQQQQHHQOSQQQGRPPHLVHHAGS
HHA AVAAVAWRTGSSAHLPPGMAAANGGGQGGLLYAQPPGFTVNGMLGSGQPGMHHSRDAHEEPPPP
PQQQQQQQQPPPHHPDHLAQQQQQQQQPHHHHPHGGPPPPPPPHHHHHEAHSDEDTPTSDDLEQFAKQFK
QRRIKLGFTQADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKI
AAQGRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGA
LPGAEDVYGASRDTPPHHGVQTPVQ

>Anolis-carolinensis gi|637253021|ref|XP_003215570.2| PREDICTED: POU domain, class 3, transcription factor 2 [Anolis carolinensis]
MATTASNHYSLLAASSPMVHAEPGSMQPGAGYRDAVQADYAALQSNHGPLSHAHQWIAALSHGGGGGGG
GGGGGGGGGGGGGGGGGGSSGGDSPWSTSPDIKPSVPPPPPPPPPPPHHPDHLVQQQQQQQQHHAPPPPH
HHHPHHPAHPHHEAHSDEDTPTSDDLEQFAKQFKQRRIKLGFTQADVGLALGTLYGNVFSQTTICRFE
ALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKIAAQGRKRKRRTSIEVSVKGALESHFLKCPKPSAQ
EITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGTLPGAEDVYGASRDTPPHHGEQDWGDALPLPSNH
PLTLLQSL

>Mus-musculus gi|6679423|ref|NP_032925.1| POU domain, class 3, transcription factor 2 [Mus musculus]
MATAASNHYSLLTSSASIVHAEPGGMQQGAGGYREAQSLVQGDYALQSNHGPLSHAHQWITALSHGGG
GGGGGGGGGGGGGGGGGGDGSFWSTSPDGQPDIKPSVVVQQGGRGDELHGPGALQQQHQQQQQQQQQQQ
QQQQQQQQQQRPPHLVHHAANHHPPGAWRSAAAAAHLPPSMGASNGGLLYSQPSFTVNGMLGAGGQPA
GLHHHGLRDAHDEPHHADHHPHSHPHQPPPPPPQGGPHGPAHHDPHSDEDTPTSDDLEQFAKQFK
QRRIKLGFTQADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKI
AAQGRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGT
LPGAEDVYGGSRDTPPHHGVQTPVQ

>Ophiophagus-hannah_PARTIAL gi|565323504|gb|ETE74074.1| POU domain, class 3, transcription factor 2, partial [Ophiophagus hannah]
FAKQFKQRRIKLGFTQADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSP
TSIDKIAAQGRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRM
TPGGALPGAEDVYGASRDTPPHHGEAGGRGGRAQASSL

>Homo-sapiens gi|119568876|gb|EAW48491.1| POU domain, class 3, transcription factor 2 [Homo sapiens]
MATAASNHYSLLTSSASIVHAEPGGMQQGAGGYREAQSLVQGDYALQSNHGPLSHAHQWITALSHGGG
GGGGGGGGGGGGGGGGGGDGSFWSTSPDGQPDIKPSVVVQQGGRGDELHGPGALQQQHQQQQQQQQQQQ
QQQQQQQQQQRPPHLVHHAANHHPPGAWRSAAAAAHLPPSMGASNGGLLYSQPSFTVNGMLGAGGQPAGL
HHHGLRDAHDEPHHADHHPHSHPHQPPPPPPQGGPHGPAHHDPHSDEDTPTSDDLEQFAKQFKQR
RIKLGFTQADVGLALGTLYGNVFSQTTICRFEALQLSFKNMCKLKPLLKNWLEEADSSSGSPTSIDKIAA
QGRKRKRRTSIEVSVKGALESHFLKCPKPSAQEITSLADSLQLEKEVVRVWFCNRRQKEKRMTPPGGTLP
GAEDVYGGSRDTPPHHGVQTPVQ

MITF

>Python-bivittatus gi|602653814|ref|XP_007432759.1| PREDICTED:
microphthalmia-associated transcription factor-like isoform X1 [Python
bivittatus]
MTRILLRQQLMREQMQEQERREQRQKQQAQFMQQRGAVSQTTPAINVSLPTSPPATQVPMEVLKVQTH
LENPTKYHIQQAQRQOVKQYLSTTLANKHNNQALSLPCPNQPSDHVMPPGTGSSAPNSPMAMLTLSNCE
KEGFYKFEEQSNRAENECRTLNTHSRVSCMQMDDVIDDIISLESSYNEEIFGLMDPALQIANTLPVSGNL
VDLYGNQGLPPPGLNISNSCPANLPNIKRELTGLGRLASQPSGEDFEGAGYTGVEHEKGGISSFPVLLMEN
ILTDGGLTECSPLSSESEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLPKSNPDMRWKGTIL
KASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQELEMQARAHGLSIIIPSTGLCSPMVNRLIKQ
EPILDNCSQEILQQHHPELSSTTTLDLTDGTITFNGLANVTESAPSTYAVPTKMGSKLEDMLMDDTSLP
AGVTDPLLSSVSPGASKTSSRRSSVSMEDTDHAC

>Canis-familiaris gi|50979188|ref|NP_001003337.1| microphthalmia-
associated transcription factor [Canis lupus familiaris]
MLEMLEYNHVQVQTHLENPTKYHIQQAQRQOVKQYLSTTLANKHANQVLSLPCPNQPGDHVMPPVPGSSA
PNSPMAMLTLSNCEKEGFYKFEEQNRAESECPMTNTHSRASCMQMDDVIDDIISLESSYNEEILGLMDP
ALQMANLTPVSGNLIDLYGNQGLPPPGLTISNSCPANLPNIKRELTACIFPTESEARALAKERQKKDNH
LIERRRRFNINDRIKELGTLPKSNPDMRWKGTILKASVDYIRKLQREQQRAKELENRQKKLEHANRH
LLLRIQELEMQARAHGLSLIPSTGLCSPDLVNRIKQEPTELENCNQLLQHHADLPCTTTLDLTDGSI
TFNNLGGAGTESSQAYSVPKMGSKLEDIILMDDTSLPVGVTDPLLSSVSPGASKTSSRRSSMSMEETDHAC

>Equus-caballus gi|255522885|ref|NP_001157346.1| microphthalmia-
associated transcription factor [Equus caballus]
MGHVENTSVVFPRAIFSTWEKETMELTCLSLRSSEEHGASKPPISSSSMTSRILLRQQLMREQMQEQ
ERREQQQKLQAAQFMQQRVVSQTTPAINVSVPTTLPSATQVPMEVLKVQTHLENPTKYHIQQAQRQOVKQ
YLSTTLANKHANQVLSLPCPNQPGDHVMPPVPGSSAPNSPMAMLTLSNCEKEGFYKFEEQNRAESECP
MNTHSRASCQMQMDDVIDDIISLESSYNEEILGLMDPALQMANLTPVSGNLIDLYSNQGLPPPGLTISNS
CPANLPNIKRELTSEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLPKSNPDMRWKGTILKAS
VDYIRKLQREQQRAKELENRQKKLEHANRHLLLRIQELEMQARAHGLSLIPSTGLCSPDLVNRIKQEP
ALENCNQLLQHHADLTCTTTLDLTDGTISFNNNLGTGTESNQAYSIPAKMGSKLEDIILMDDTSLPVGV
TDPLLSSVSPGASKTSSRRSSMSMEETEAC

>Ophiophagus-hannah_PARTIAL gi|565313510|gb|ETE65831.1| Microphthalmia-
associated transcription factor, partial [Ophiophagus hannah]
MTRILLRQQLMREQMQEQERREQRQKQQAQFMQQRGAVSQTTPAINVSLPASLPPATQVPMEVLKVQTH
LENPTKYHIQQAQRQOVKQYLSTTLANKHNNQALSLPCPNQPVDMVMPPGTGSSAPNSPMAMLTLSNCE
KEGFYKFEEQSNRAENECQSLNTHPRVSCMQMDDVIDDIISLESSYNEEIFGLMDPALQIANTLPVSGNL
VDLYGNQGLPPPGLNISNSCPANLPNIKRELTGYTLYLPPTKVEAGIFARYVSQSIYEVECSREISKFTL
QLLPFNIIILNLTSLTCSISYVFPPIESEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLPKSNP
DMRWKGTILKASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQVC

>Gallus-gallus gi|46048817|ref|NP_990360.1| microphthalmia-associated
transcription factor [Gallus gallus]
MTRILLRQQLMREQMQEQERREQQKQQAQFMQQRVVSQTTPAINVSVPASLPPATQVPMEVLKVQTH
LENPTKYHIQQAQRQOVKQYLSTTLANKHANQALSLPCPNQPGDHVMPPGTGSSAPNSPMAMLTLSNCE
KEGFYKFEEQSRVESECPALNTHSRASCQMQMDDVIDDIISLESSYNEEILGLMDPALQMANLTPVSGNL
IDLYGNQSMPPPGLNISNSCPANLPNIKRELTSEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLP
KSNPDMRWKGTILKASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQELEMQARAHGLSLVP
STGICSPDMVNRVIKQEPVLDNLCNQLMPHHTDLSTTTLDLTDGTITFSDNLGNVTEPTGTYSVPKMG
SKLEDIILMDDTSLPVGVTDPLLSSVSPGASKTSSRRSSVSMEDTDHAC

>Mus-musculus gi|148666943|gb|EDK99359.1| microphthalmia-associated transcription factor [Mus musculus]
MLEMLEYSHYQVQTHLENPTKYHIQQAQRHQVKQYLSTTLANKHASQVLSSPCPNQPGDHAMPPVPGSSA
PNSPMAMLTLLNSNCEKEAFYKFEEQSRAESECPCGMNTHSRASCMQMDVIDDIISLESSYNEEILGLMDP
ALQMANTLPVSGNLIDLYSNQGLPPPGLTISNSCPANLPNIKRELTACIFPTESEARALAKERQKKDNHN
LIERRRRFNINDRIKELGTLPKSNPDMRWKGTILKASVDYIRKLQREQQRAKDLENRQKKLEHANRH
LLLRVQELEMQARAHGLSLIPSTGLCSPDLVNRIKQEPVLENCSEQELVQHQADLTCTTTLDLTDGTITF
TNNLGTMPESPAYSIPRKMGSNLEDILMDDALSPVGVTDPLLSSVSPGASKTSSRRSSMSAEETEHC

>Gallus-gallus gi|725825443|gb|AIY34493.1| microphthalmia-associated transcription factor [Gallus gallus]
MTRILLRQQLMREMQEQERREQQQKQAAQFMQQRVPVSQTPAINVSVPASLPPATQVPMEVLKVQTH
LENPTKYHIQQAQRQVKQYLSTTLANKHANQALSPLCPNPGDHVMPPGTGSSAPNSPMAMLTLLNSNCE
KEGFYKFEEQSRVESECPALNTHSRASCMQMDVIDDIISLESSYNEEILGLMDPALQMANTLPVSGNLI
DLYGNQSMPPPGLNISNSCPANLPNIKRELTESEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLP
KSNPDMRWKGTILKASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQELEMQARAHGLSLVP
STGICSPDMVNRVIKQEPVLDNCNQDLMPHHTDLSTTTLDLTDGTITFSDNLGNVTEPTGTYSVPAKMG
SKLEDILMDDTLSPVGVTDPLLSSVSPGASKTSSRRSSVSMEDTDHAC

>Alligator-mississippiensis gi|564263951|ref|XP_006270831.1| PREDICTED:
microphthalmia-associated transcription factor isoform X1 [Alligator mississippiensis]
MTRILLRQQLMREMQEQERREQQQKQAAQFMQQRVPVSQTPAINVSVPSLPPATQVPMEVLKVQTH
LENPTKYHIQQAQRQVKQYLSTTLANKHANQALSPLCPNPGDHVMPSGTGSSAPNSPMAMLTLLNSNCE
KEGLYKFEEQSRLESECPALNTHSRRTSCMQMDVIDDIISLESSYSEEILGLMDPALQMANTLPVSGNLI
DLYGNHTSMPPPGLNISNSCPANLPNIKRELTACIFPTESEARALAKERQKKDNHNLIERRRRFNINDRIK
ELGTLPKSNPDMRWKGTILKASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQELEMQARAH
GLSLVPSTGLCSPDVNRVIKQESVIDNCNPDIVQHRDLSCTTTLDLTDGTITFSDNLGNVTDSSAYSV
PTKMGSKLEDILMDDTLSPVGVTDPLLSSVSPGASKTSSRRSSVSMEDTDHTC

>Chrysemys-picta-bellii gi|641792697|ref|XP_008177703.1| PREDICTED:
microphthalmia-associated transcription factor isoform X1 [Chrysemys picta bellii]
MLNNLPRTLWEQVSMQKQKEVEKFSFAFSPKIGLLEHASFWAALSCGARNKTESSSSYGSSSLSVKHRPRWG
PEPSLGFQGAIAVQIHNDSDGKTLTYQVQLQILSSSEHPGASKPPLSSSSMTRILLRQQLMREMQEQE
RREQQQKQAAQFMQQRVPLSQTTPAINVSVPSNLPPPTQVPMEVLKVQTHLENPTKYHIQQAQRQVKQY
LSTTLANKHTNQALSPLCPNPGDHVMPPGTGSSAPNSPMAMLTLLNSNCEKEGFYKFEEQSRVESECPAL
NTHTRASCMQMDVIDDIISLESSYNEEILGLMDPALQMANTLPVSGNLIDLYGNQGMPPSGLNVNSCP
ANLPNIKRELTACIFPTESEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLPKSNPDMRWKGT
ILKASVDYIRKLQREQQRTKELENRQKKLEHANRHLLLRIQELEMQARAHGLSLVPSTGLCSPDVNRVI
KQEPVIDNCNQDVLQHRSDLSCTTTLDLTDGTITFNDNLGTYSVPTKAGSKLEDILMDDTLSPVGVTDPL
LSSVSPGASKTSSRRSSVSMEDTDHAC

LEF-1
>Python-bivittatus gi|602628890|ref|XP_007421376.1| PREDICTED: lymphoid enhancer-binding factor 1 [Python bivittatus]
MPQLSGGGGPELPCATDEMIPFKDEGDPQKETIFAEISHPEEEGDLADIKSSLVNESETIPNSNGHGHEV
SRPGQSQEAYEKGREHPEEGKHTDGVLYNKGPSYSGYSYIMPMNNDPYMSNGSLSPPIPRTSNKVPP

VQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDSDVNTKQGMTRHPPGPDLDSTFYPLSPGSGVQITPPLGWQ
GQPVYISGGFRQPFSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVKP
QHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARK
ERQLHMQLYPGWSARDNYGKKKKRREKLQESTSGTAPRMTAAYI

>Mus-musculus gi|27735019|ref|NP_034833.2| lymphoid enhancer-binding
factor 1 isoform a [Mus musculus]
MPQLSGGGGGGDPPELCADEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGHEV
VRQAPSSQEPYHDKAREHPDEGKHPDGGLYNKGPSYSSYSGYIMPMNNSDPYMSNGSLSPPIPRTSNKV
PVVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMRSRHPAPEIPTFYPLSPGGVGQITPPIG
WQGQPVYIPITGGFRQPYSSLSGDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHV
KPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELA
RKERQLHMQLYPGWSARDNYGKKKKRREKLQESTSGTGPRMTAAYI

>Ophiophagus-hannah_PARTIAL gi|565315274|gb|ETE67199.1| Lymphoid
enhancer-binding factor 1, partial [Ophiophagus hannah]
MARCEHQYSVFDTRARFTVYAAQALDIRSSNKVPVQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDSDV
STKQGMNRHPPGPDISTFYPLSPGSGVQITPPLGWQGPVYPISSGFRHPYSSLSVDTSMSRFSHHMIP
GPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANWH
ALSREEQAKYYELARKERQLHMQLYPGWSARDNYSSSLILFFHFPELPI SLHEKYLNAMKSANLGSVAG
LYCAGNTTVTELYLGRWYGFYYLPVFFHFIYGGKKFLNFMSLPYENSLELEI

>Gallus-gallus gi|45384346|ref|NP_990344.1| lymphoid enhancer-binding
factor 1 [Gallus gallus]
MPQLPGAGGGGGDPPELCADEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIAPGSGGHE
VSRQTPAQDSYHDKGREHPEEGKHPDGGLYSKGPSYSSYSGYIMPMNNDPYPMPNGSLSPPIPRTSNKV
PVVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVSSKQGMRSRHPAPDIPTFYPLSPGGVGQITPPLG
WFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPHNDSELMHVVKPQHEQRKEQEPKRPHIKKPLNAFMLY
KEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRKR
EKLQESASGTGPRMTAAYI

>Homo-sapiens gi|29792286|gb|AAH50632.1| Lymphoid enhancer-binding factor
1 [Homo sapiens]
MPQLSGGGGGGGDPPELCADEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPASNGH
EVARQAQTSQEPYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMPMNNDPYPMSNGSLSPPIPRTSN
KVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHIPSDVNSKQGMRSRHPAPDIPTFYPLSPGGVGQITPP
LGWQGQPVYIPITGGFRQPYSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLM
HVVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYE
LARKERQLHMQLYPGWSARDNYGKKKKRREKLQESASGTGPRMTAAYI

> Alligator-sinensis gi|557297798|ref|XP_006031200.1| PREDICTED: lymphoid
enhancer-binding factor 1 isoform X1 [Alligator sinensis]
MMPNMNDPYPMSNGSLSPPIPRTSNKVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHMPDSDVNSKQGM
RHPPAPDIPTFYPLSPGGVGQITPPLGWQGPVYPISSGFRQPYSSLSVDPSMSRFSHHMIPGPPGPHT
TGIPHPAIVTPQVKQEHPHNDSELMHVVKPQHEQRKEQEPKRPHIKKPLNAFMLYMKEMRANVVAECTLKE
SAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKKKRREKLQESASGGKRNFT
STCKTKAATPGPLLEMEAC

>Canis-familiaris gi|74002121|ref|XP_863402.1| PREDICTED: lymphoid
enhancer-binding factor 1 isoform X3 [Canis lupus familiaris]
MPQLSGAGGGGGGGDPPELCADEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESEIIPTSNG
HEVARQAQTSQESYHDKAREHPDDGKHPDGGLYNKGPSYSSYSGYIMPMNNDPYPMSNGSLSPPIPRTS

NKVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHLPDVNSKQGMSRHPPAPEIPTFYPLSPGGVGQITP
PLGWFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVVKPQHEQRKEQEPKRPHIKKPLNAFM
LYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKK
RKREKLQESTSGGKRNSFPTCKAKAATPGPILLEMEAC

>Thamnophis-sirtalis gi|927194465|ref|XP_013930427.1| PREDICTED: lymphoid
enhancer-binding factor 1 isoform X1 [Thamnophis sirtalis]
MPQLSGGGGGPELPCATDEMIPFKDEGDPQKETIFAEISHPEEEGDLADIKSSLVNESETIPSSNGHEVSR
QGQSQEVYEKSREHPPEGKHIDGVLYNKGPSYSGYIMPMNMNDPYMSNGSLSPPIPRTSNKVPVVQP
SHAVHPLTPLITYSDEHFSPGTHPSHLPDVNTKQGMNRHPPGPDISTFYPLSPGSGVQITPPLGWFSHH
MIPGPPGPHTTGIPHPAIVTPQVKQEHPTDSDLMHVVKPQHEQRKEQEPKRPHIKKPLNAFM
LYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYGKKK
RKREKLQESTSGIFMGTAPRMTAAYI

> Anolis-carolinensis gi|327283645|ref|XP_003226551.1| PREDICTED:
lymphoid enhancer-binding factor 1 isoform X2 [Anolis carolinensis]
MPQLSGGGGGGGGGGGGGDPELPCATDEMIPFKDEGDPQKEKIFAEISHPEEEGDLADIKSSLVNESETIS
SSNGHEVSRQGQPQEIYHDKGREHPPEGKHTDGGLYKGPSYSGYIMPMNMNDPYMSNGSLSPPIPR
RTSNKVVPVVQPSHAVHPLTPLITYSDEHFSPGTHPSHLPDVNSKQGMSRHPPGPDMPFTFYPLSPG
SVGQITPPLGWQGPVYPISSGFRQYPSSLSVDTSMSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQ
EHPTDSDLMHVVKPQHEQRKEQEPKRPHIKKPLNAFM
LYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYG
KKKRRKREKLQESTSGAAPRMTAAYI

>Equus-caballus gi|545210283|ref|XP_005607957.1| PREDICTED: lymphoid
enhancer-binding factor 1 isoform X3 [Equus caballus]
MVARQAQTSQEPYHDKAREHPDDGKHPDGGLYSKGPSYSSYSGYIMPMNMNSDPYMSNGSLSPPIPR
TSNKVPVVQPSHAVHPLTPLITYSDEHFSPGSHPSHLPDVNSKQGMSRHPPAPEIPAFYPLSPGGVG
QITPPLGWQGPVYPLTGGLRQYPSSLSVDTMPSRFSHHMIPGPPGPHTTGIPHPAIVTPQVKQEH
PHADSDLMHVVKPQHEQRKEQEPKRPHIKKPLNAFM
LYMKEMRANVVAECTLKESAAINQILGRRWHALSREEQAKYYELARKERQLHMQLYPGWSARDNYG
KKKRRKREKLQESTSGGKRSSFPTCKAKAATPGPILLEMEAC