Supporting Information

Ameloblastin (*Ambn*) upstream region contains structural elements regulating transcriptional activity in a stromal cell line derived from bone marrow

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Table S1: References related to regulatory elements and/or transcription factors.

Reference ID	Category:	References:
A1	OSE-2	DHAMIJA S and KREBSBACH PH. Role of Cbfa1 in ameloblastin gene transcription. *J Biol Chem* 2001; **276**: 35159-64.
A2	OSE-2	DUCY P, ZHANG R, GEOFFROY V, RIDALL AL, AND KARSENTY G. Osf2/Cbfa1: a transcriptional activator of osteoblast differentiation. *Cell* 1997; **89**: 747-54.
A3	SOX	BRIDGEWATER LC, WALKER MD, MILLER GC, ELLISON TA, HOLSINGER LD, POTTER JL, et al. Adjacent DNA sequences modulate Sox9 transcriptional activation at paired Sox sites in three chondrocyte-specific enhancer elements. *Nucleic Acids Research* 2003; **5**: 1541-53
A4	MSX	FELEDY JA, MORASSO MI, JANG SI, SARGENT TD. Transcriptional activation by the homeodomain protein distal-less 3. *Nucleic Acids Res* 1999; **3**: 764-70
A5	GATA-1	GHIRLANDO R, TRAINOR CD. Determinants of GATA-1 binding to DNA - The role of non-finger residues. *Journal of Biological Chemistry* 2003; **46**: 45620-8
A6	Shh/Gli1	TAKAHASHI S, KAWASHIMA N, SAKAMOTO K, NAKATA A, KAMEDA T, SUGIYAMA T, et al. Differentiation of an ameloblast-lineage cell line (ALC) is induced by Sonic hedgehog signaling. *Biochem Biophys Res Commun* 2007; **2**: 405-11
A7	Gli1	YOON JW, KITA Y, FRANK DJ, MAJEWSKI RR, KONICEK BA, NOBREGA MA, et al. Gene expression profiling leads to identification of GLI1-binding elements in target genes and a role for multiple downstream pathways in GLI1-induced cell transformation. *J Biol Chem* 2002; **7**: 5548-55
A8	OSE-2	LEE KS, KIM HJ, LI QL, CHI XZ, UETA C, KOMORI T, et al. Runx2 is a common target of transforming growth factor beta1 and bone morphogenetic protein 2, and cooperation between Runx2 and Smad5 induces osteoblast-specific gene expression in the pluripotent mesenchymal precursor cell line C2C12. *Mol Cell Biol* 2000; **23**: 8783-92
A9	AP-1, TCF-1, CACCC, CF2-II, Krueppel	DHAMIJA S, LIU Y, YAMADA Y, SNEAD ML, KREBSBACH PH. Cloning and characterization of the murine ameloblastin promoter. *J Biol Chem* 1999; **29**: 20738-43

A10	Embryonic development/HOX7	MACKENZIE A, FERGUSON MW, SHARPE PT. Hox-7 expression during murine craniofacial development. *Development* 1991; **2**: 601-11.
A11	Embryonic development/ HOX7	MACKENZIE A, LEEMING GL, JOWETT AK, FERGUSON MW, SHARPE PT. The homeobox gene Hox 7.1 has specific regional and temporal expression patterns during early murine craniofacial embryogenesis, especially tooth development in vivo and in vitro. *Development* 1991; **2**: 269-85.
A12	Embryonic development/ MSX/Shh/Gli3	LALLEMAND Y, BENSOUSSAN V, CLOMENT CS, ROBERT B. Msx genes are important apoptosis effectors downstream of the Shh/Gli3 pathway in the limb. *Dev Biol* 2009; **2**: 189-98.
A13	Embryonic development/ Embryonic Factor 1	XU J, ZHANG HY, XIE CH, XUE HW, DIJKHUIS P, LIU CM. EMBRYONIC FACTOR 1 encodes an AMP deaminase and is essential for the zygote to embryo transition in Arabidopsis. *Plant J* 2005; **5**: 743-56.
A14	Embryonic development/ NKX2-5/GATA4	RIAZI AM, TAKEUCHI JK, HORNBERGER LK, ZAIDI SH, AMINI F, COLES J, et al. NKX2-5 regulates the expression of beta-catenin and GATA4 in ventricular myocytes. *PLoS One* 2009; **5**: e5698.
A15	Embryonic development/ MEF2C	VERZI MP, AGARWAL P, BROWN C, MCCULLEY DJ, SCHWARZ JJ, BLACK BL. The transcription factor MEF2C is required for craniofacial development. *Dev Cell* 2007; **4**: 645-52.
A16	Embryonic development/osteogenesis Gli3/PLZF	BARNA M, PANDOLFI PP, NISWANDER L. Gli3 and Plzf cooperate in proximal limb patterning at early stages of limb development. *Nature* 2005; **7048**: 277-81.
A17	Embryonic development/ OG-2/NOBOX	SUZUMORI N, YAN C, MATZUK MM, RAJKOVIC A. Nobox is a homeobox-encoding gene preferentially expressed in primordial and growing oocytes. *Mech Dev* 2002; **1-2**: 137-41.
A18	Embryonic development/ osteogenesis/ AJ18	JHEON A, CHEN J, TEO W, GANSS B, SODEK J, CHEIFETZ S. Temporal and spatial expression of a novel zinc finger transcription factor, AJ18, in developing murine skeletal tissues. *J Histochem Cytochem* 2002; **7**: 973-82.
A19	Embryonic development	HOROWITZ MC, LORENZO JA. B lymphocytes and the skeleton. *Ann N Y Acad Sci* 2007; **1117**: 82-93
A20	Review Embryonic development/ HOX	WELLIK DM. Hox genes and vertebrate axial pattern. *Curr Top Dev Biol* 2009; **88**: 257-78
A21	Review Embryonic development/ PAX	CHI N, EPSTEIN JA. Getting your Pax straight: Pax proteins in development and disease. *Trends Genet* 2002; **1**: 41-7
A22	Review Embryonic development/ PAX	WANG Q, FANG WH, KRUPINSKI J, KUMAR S, SLEVIN M, KUMAR P. Pax genes in embryogenesis and oncogenesis. *J Cell Mol Med* 2008; **6A**: 2281-94
A23	Review Embryonic development/ MEF2	POTTHOFF MJ, OLSON EN. MEF2: a central regulator of diverse developmental programs. *Development* 2007; **23**: 4131-40
A24	Review Embryonic development	REMENYI A, SCHOLER HR, WILMANNS M. Combinatorial control of gene expression. *Nat Struct Mol Biol* 2004; **9**: 812-5
A25	Review Embryonic development	ALCALAY NI, VANDEN HEUVEL GB. Regulation of cell proliferation and differentiation in the kidney. *Front Biosci* 2009; **14**: 4978-91
A26	Embryonic development/ HOX/CDX	YOUNG T, DESCHAMPS J. Hox, Cdx, and anteroposterior patterning in the mouse embryo. *Curr Top Dev Biol* 2009; **88**: 235-55
B1	Osteogenesis/ YY1	SHI Z, SILVEIRA A, PATEL P, FENG X. YY1 is involved in RANKL-induced transcription of the tartrate-resistant acid phosphatase gene in osteoclast differentiation. *Gene* 2004; **1**: 117-26
B2	Osteogenesis/ BCL6	YU RY, WANG X, PIXLEY FJ, YU JJ, DENT AL, BROXMEYER HE, et al. BCL-6 negatively regulates macrophage proliferation by suppressing autocrine IL-6 production. *Blood* 2005; **4**: 1777-84
B3	Osteogenesis/ MEF2C	ARNOLD MA, KIM Y, CZUBRYT MP, PHAN D, MCANALLY J, QI X, et al. MEF2C transcription factor controls chondrocyte hypertrophy and bone development. *Dev Cell* 2007; **3**: 377-89

B4	Osteogenesis/ MEF2C	STEHLING-SUN S, DADE J, NUTT SL, DEKOTER RP, CAMARGO FD. Regulation of lymphoid versus myeloid fate 'choice' by the transcription factor Mef2c. *Nat Immunol* 2009; **3**: 289-96
B5	Osteogenesis/ LEF-1	KAHLER RA, WESTENDORF JJ. Lymphoid enhancer factor-1 and beta-catenin inhibit Runx2-dependent transcriptional activation of the osteocalcin promoter. *J Biol Chem* 2003; **14**: 11937-44
B6	Osteogenesis/ PLZF	INOUE I, IKEDA R, TSUKAHARA S. Current topics in pharmacological research on bone metabolism: Promyelotic leukemia zinc finger (PLZF) and tumor necrosis factor-alpha-stimulated gene 6 (TSG-6) identified by gene expression analysis play roles in the pathogenesis of ossification of the posterior longitudinal ligament. *J Pharmacol Sci* 2006; **3**: 205-10
B7	Osteogenesis/ PAX5	HOROWITZ MC, XI Y, PFLUGH DL, HESSLEIN DG, SCHATZ DG, LORENZO JA, et al. Pax5-deficient mice exhibit early onset osteopenia with increased osteoclast progenitors. *J Immunol* 2004; **11**: 6583-91
B8	Osteogenesis/ GATA-1	KACENA MA, SHIVDASANI RA, WILSON K, XI Y, TROIANO N, NAZARIAN A, et al. Megakaryocyte-osteoblast interaction revealed in mice deficient in transcription factors GATA-1 and NF-E2. *J Bone Miner Res* 2004; **4**: 652-60
B9	Review/ Osteogenesis	EZOE S, MATSUMURA I, SATOH Y, TANAKA H, KANAKURA Y. Cell cycle regulation in hematopoietic stem/progenitor cells. *Cell Cycle* 2004; **3**: 314-8
B10	Review/ Osteogenesis	KAWAI M, DEVLIN MJ, ROSEN CJ. Fat targets for skeletal health. *Nat Rev Rheumatol* 2009; **7**: 365-72
B11	Review/ Osteogenesis	TAKADA I, KOUZMENKO AP, KATO S. Molecular switching of osteoblastogenesis versus adipogenesis: implications for targeted therapies. *Expert Opin Ther Targets* 2009; **5**: 593-603
B12	Review/ Osteogenesis	HOROWITZ MC, LORENZO JA. The origins of osteoclasts. *Curr Opin Rheumatol* 2004; **4**: 464-8
C1	Cell cycle control and differentiation of bone related cells	YU RY, WANG X, PIXLEY FJ, YU JJ, DENT AL, BROXMEYER HE, et al. BCL-6 negatively regulates macrophage proliferation by suppressing autocrine IL-6 production. *Blood* 2005; **4**: 1777-84
C2	Cell cycle control and differentiation of bone related cells	KACENA MA, SHIVDASANI RA, WILSON K, XI Y, TROIANO N, NAZARIAN A, et al. Megakaryocyte-osteoblast interaction revealed in mice deficient in transcription factors GATA-1 and NF-E2. *J Bone Miner Res* 2004; **4**: 652-60
C3	Cell cycle control and differentiation of bone related cells	EZOE S, MATSUMURA I, SATOH Y, TANAKA H, KANAKURA Y. Cell cycle regulation in hematopoietic stem/progenitor cells. *Cell Cycle* 2004; **3**: 314-8
C4	Cell cycle control and differentiation of bone related cells	JHEON AH, SUZUKI N, NISHIYAMA T, CHEIFETZ S, SODEK J, GANSS B. Characterization of the 5'-flanking region of the rat AJ18 gene. *Gene* 2003; **310**: 203-13
C5	Cell cycle control and differentiation of bone related cells	IKEDA R, YOSHIDA K, TSUKAHARA S, SAKAMOTO Y, TANAKA H, FURUKAWA K, et al. The promyelotic leukemia zinc finger promotes osteoblastic differentiation of human mesenchymal stem cells as an upstream regulator of CBFA1. *J Biol Chem* 2005; **9**: 8523-30
C6	Cell cycle control and differentiation of bone related cells	KAHLER RA, GALINDO M, LIAN J, STEIN GS, VAN WIJNEN AJ, WESTENDORF JJ. Lymphocyte enhancer-binding factor 1 (Lef1) inhibits terminal differentiation of osteoblasts. *J Cell Biochem* 2006; **5**: 969-83
C7	Cell cycle control and differentiation of bone related cells	WAN Y, CHONG LW, EVANS RM. PPAR-gamma regulates osteoclastogenesis in mice. *Nat Med* 2007; **12**: 1496-503
C8	Cell cycle control and differentiation of bone related cells	SYVERSEN U, STUNES AK, GUSTAFSSON BI, OBRANT KJ, NORDSLETTEN L, BERGE R, et al. Different skeletal effects of the peroxisome proliferator activated receptor (PPAR)alpha agonist fenofibrate and the PPARgamma agonist pioglitazone. *BMC Endocr Disord* 2009; **9**: 10
C9	Cell cycle control and differentiation of bone related cells	JHEON A, BANSAL AK, ZHU B, GANSS B, CHEIFETZ S, SODEK J. Characterisation of the constitutive over-expression of AJ18 in a novel rat stromal bone marrow cell line (D8-SBMC). *Arch Oral Biol* 2009; **8**: 705-16

C10	Review/Cell cycle control and differentiation of bone related cells	YOUNG T, DESCHAMPS J. Hox, Cdx, and anteroposterior patterning in the mouse embryo. *Curr Top Dev Biol* 2009; **88**: 235-55
C11	Review/Cell cycle control and differentiation of bone related cells	CAROTTA S, NUTT SL. Losing B cell identity. *Bioessays* 2008; **3**: 203-7
D1	Bone metabolism/ Shh/Gli	ZHAO M, QIAO M, HARRIS SE, CHEN D, OYAJOBI BO, MUNDY GR. The zinc finger transcription factor Gli2 mediates bone morphogenetic protein 2 expression in osteoblasts in response to hedgehog signaling. *Mol Cell Biol* 2006; **16**: 6197-208
D2	Bone metabolism/ Shh/Gli	JAMES MJ, JARVINEN E, WANG XP, THESLEFF I. Different roles of Runx2 during early neural crest-derived bone and tooth development. *Journal of Bone and Mineral Research* 2006; **7**: 1034-44
D3	Bone metabolism/ Shh/Gli	QI HL, AGUIAR DJ, WILLIAMS SM, LA PEAN A, PAN W, VERFAILLIE CM. Identification of genes responsible for osteoblast differentiation from human mesodermal progenitor cells. *Proceedings of the National Academy of Sciences of the United States of America* 2003; **6**: 3305-10
D4	Bone metabolism	HILL TP, SPATER D, TAKETO MM, BIRCHMEIER W, HARTMANN C. Canonical Wnt/beta-catenin signaling prevents osteoblasts from differentiating into chondrocytes. Dev *Cell* 2005; **5**: 727-38
D5	Bone metabolism	FUKUMOTO S, KIBA T, HALL B, IEHARA N, NAKAMURA T, LONGENECKER G, et al. Ameloblastin is a cell adhesion molecule required for maintaining the differentiation state of ameloblasts. *J Cell Biol* 2004; **5**: 973-83
D6	Bone metabolism	YOON JW, KITA Y, FRANK DJ, MAJEWSKI RR, KONICEK BA, NOBREGA MA, et al. Gene expression profiling leads to identification of GLI1-binding elements in target genes and a role for multiple downstream pathways in GLI1-induced cell transformation. *J Biol Chem* 2002; **7**: 5548-55
D7	Bone metabolism	WATSON RP, TEKKI-KESSARIS N, BOULTER CA. Characterisation, chromosomal localisation and expression of the mouse Kid3 gene. *Biochim Biophys Acta* 2000; **1-2**: 153-8
D8	Bone metabolism	KAWASHIMA N, SHINDO K, SAKAMOTO K, KONDO H, UMEZAWA A, KASUGAI S, et al. Molecular and cell biological properties of mouse osteogenic mesenchymal progenitor cells, Kusa. *J Bone Miner Metab* 2005; **2**: 123-33
D9	Bone metabolism	MCMAHON AP, INGHAM PW, TABIN CJ. Developmental roles and clinical significance of hedgehog signaling. Curr Top Dev Biol 2003;53:1-114
D10	Bone metabolism	IWASAKI M, LE AX, HELMS JA. Expression of indian hedgehog, bone morphogenetic protein 6 and gli during skeletal morphogenesis. *Mech Dev* 1997; **1-2**: 197-202
D11	Bone metabolism	JHEON AH, GANSS B, CHEIFETZ S, SODEK J. Characterization of a novel KRAB/C2H2 zinc finger transcription factor involved in bone development. *J Biol Chem* 2001; **21**: 18282-9
D12	Bone metabolism	KARSENTY G. Transcriptional control of skeletogenesis. *Annu Rev Genomics Hum Genet* 2008; **9**: 183-96
E1	SOX	HARLEY VR, LOVELL-BADGE R, GOODFELLOW PN. Definition of a consensus DNA binding site for SRY. *Nucleic Acids Res* 1994; **8**: 1500-1
E2	SOX	WEGNER M. All purpose Sox: The many roles of Sox proteins in gene expression. *Int J Biochem Cell Biol* 2010; **3**: 381-90
F1	PPAR	LEMBERGER T, BRAISSANT O, JUGE-AUBRY C, KELLER H, SALADIN R, STAELS B, et al. PPAR tissue distribution and interactions with other hormone-signaling pathways. *Ann N Y Acad Sci* 1996; **804**: 231-51
F2	PPAR	ISSEMANN I, GREEN S. Activation of a member of the steroid hormone receptor superfamily by peroxisome proliferators. *Nature* 1990; **6294**: 645-50
F3	PPAR	TAKADA I, KOUZMENKO AP, KATO S. Wnt and PPARgamma signaling in osteoblastogenesis and adipogenesis. *Nat Rev Rheumatol* 2009; **8**: 442-7

Table S2: Localization of potential cis regulatory sequences according to transcription start site. Nucleotide sequence and score hit are indicated.

Gene name:	Protein name: Sequence	Position	+/- Strand	Score hit
RFX1 1)	MHC classII regulatory factor RFX1 GTGGGGCTCAAGGAACTC	-3787	(+)	0.982
RFX1 2)	AAGATACTAAGGAAACAA	-3737	(+)	0.982
Pax-5	Paired box protein CTGATGGCGTTCCAGCACTGAGAAGGGA	-3652	(-)	1.000
OSE2	Osteoblast Specific Element 2 AACCTC	-3614	(+)	manual
OSE2	Osteoblast Specific Element 2 CTCCAA	-3587	(+)	manual
MEF2	Myocyte-specific enhancer factor 2 CAAATCCCTTAAAATAGGCCCC	-3523	(+)	1.000
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-3475	(+)	manual
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-3468	(+)	manual
Pax-4	Paired box protein GGGGTTGAAGAGTGACTCACAATAATTTGG	-3455	(-)	0.823
Pax-8	Paired box protein GGTTGAAGAGTGACT	-3453	(+)	0.973
MAF	V-maf musculoaponeurotic fibrosarcoma oncogene Homolog GTGACTCACAA	-3444	(-)	1.000
Octamer	NONO = Non POU-Domain-containing octamer binding Protein TTATTTACATT	-3407	(+)	0.966
FAC1	Embryonic Factor 1 (human): Bromodomain PHD finger transcription factor TATTTGTTTTGTCC	-3305	(-)	0.978
HNF3alpha	Hepatocyte Nuclear Factor 3 TATTTGTTTTG	-3305	(+)	0.978
HNF3LPH	Hepatocyte Nuclear Factor 3 TGTTTGTTTTA	-3250	(+)	1.000
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-3241	(+)	manual
Octamer	NONO = Non POU-Domain-containing octamer binding Protein GGATTTGCATT	-3223	(+)	1.000
CDP	CCAT Displacement Protein = Cux1 TGCATTGATCAGGAA	-3218	(+)	0.930
Tel-2	Telomere length regulation protein TEL2 homolog CAGGAAGTAG	-3209	(-)	1.000

ISGF-3	Signal transducer and activator of transcription 1-alpha/ beta (Transcription factor ISGF-3 components p91/p84) = STAT-1 GAGAAAGGGAAACTG	-3179	(-)	1.000
PLZF	Promylocytic leukemia zinc finger AATCTATTTTCAATTTAAAAGAAATCAAA	-3139	(-)	0.979
FAC1	Embryonic Factor 1 (human): Bromodomain PHD finger transcription factor TAAAACAACACACA	-3087	(+)	1.000
CdxA	CDX1 is a caudal-type homeobox intestine-specific transcription factor ATTTATA	-3034	(+)	1.000
OSE2	Osteoblast Specific Element 2 ACCCAC	-3018	(+)	manual
IPF1	Insulin Promoter Factor Synonym Pdx1Pancreatic Duedenal homebox 1 GACTTAATGATT	-2982	(+)	1.000
Hand:E47	E12/E47 basic helix-loophelix transcription factor (the E2A gene product) CAAGAAGTCTGGAAAA	-2965	(+)	1.000
Pax-4	Paired box protein GAAAAACAAGAATTAAACCCAAATCACTAT	-2954	(+)	0.943
YY1	Yin and Yang 1 (synonym NMP1) AAACATGGC	-2905	(-)	1.000
IPF1	Insulin Promoter Factor Synonym Pdx1Pancreatic Duedenal homebox 1 AAATTAATGAAT	-2894	(+)	1.000
CDP CR3	CCAT Displacement Protein = Cux1 CAATAAATCTAAGAG	-2858	(-)	0.996
PPAR□ :RXR□ PPAR□	Peroxisome proliferator-activated receptor gamma RXR□ Retinoic acid receptor alpha AAAAATGCAAGATTGACCAATTC	-2829	(-)	1.000
OG-2	Nobox OG-2 Homebox protein NOBOX CAATTA	-2760	(-)	1.000
OSE2	Osteoblast Specific Element 2 CACCAA	-2726	(+)	manual
Pax-4	Paired box protein AAAAATTCTCCACCTGGAAATATACACACA	-2685	(+)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 CCACC	-2676	(+)	1.000
BCL6	B-cell lymphoma 6 proteinhomolog ACCTGGAAAT	-2674	(-)	0.985
PPARα:RXRα	Peroxisome proliferator-activated receptor alpha RXRα Retinoic acid receptor alpha ACTGAGAAGGTTATAGTTAA	-2640	(+)	0.789
POU3F2	POU domain, class 3, transcription factor 2 ATGAACATAT	-2576	(-)	0.891
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-2555	(+)	manual

PPARα:RXRα	Peroxisome proliferator-activated receptor alpha RXRα Retinoic acid receptor alpha TATTCAAAGGCCAAATGTCT	-2468	(+)	0.751
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-2466	(+)	manual
HOXA7	Homebox proteoin Hox-A7 AGATTGG	-2423	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-2418	(-)	1.000
Pax-6	Paired box protein GAGCTCCAGGCCAG	-2407	(-)	0.854
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha CTCCAGGCCAGCCTCATCTACAT	-2404	(+)	0.832
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha CTCCAGGCCAGCCTCATCTACAT	-2404	(-)	0.686
Pax-4	Paired box protein GAAAAATGTCGCCTTTAATCCCGGCACTCA	-2361	(+)	0.943
Muscle initiator sequences 19	TAATCCCGGCACTCAGGAGGC	-2346	(+)	0.998
Pax-6	Paired box protein GAGTTCCAGGACAA	-2278	(-)	1.000
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha TTTGAGGCCAGCCTGATCGACAA	-2304	(-)	0.787
BCL6	B-cell lymphoma 6 proteinhomolog AGTTCCAGGA	-2277	(+)	0.980
PLZF	Promylocytic leukemia zinc finger GTATTCAGCTTCCTTTACCATCAAGAAAA	-2149	(-)	1.000
Cart-1	Cartilage homeoprotein 1 = ALX 1 AGAAAATGAAAATTAAAA	-2126	(-)	1.000
LEF1,TCF1	Lymphoid enhancer-binding factor 1 T-cell-specific transcription factor 1 GAGATCAAAGC	-2101	(-)	1.000
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-2098	(+)	manual
MYB	Myb proto-oncogene protein TAACTGACAGT	-2088	(-)	1.000
Tel-2	Telomere length regulation protein TEL2 homolog CAGGAAGTAG	-2068	(-)	1.000
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha GCCTTGGTCACTTTTGCTAAGAT	-2047	(+)	1.000
BCL6	B-cell lymphoma 6 proteinhomolog TCCTTGAAAT	-1985	(-)	0.980

MEF-2	Myocyte-specific enhancer factor 2 TTGAAATCTTAAAATAGATCAT	-1982	(+)	1.000
CDP	CCAT Displacement Protein = Cux1 AAAATAGATCATAGG	-1972	(+)	0.912
GATA-1	GATA binding Factor 1 AGATAA	-1905	(+)	manual
OG-2	Nobox OG-2 Homebox protein NOBOX TAATTG	-1902	(+)	1.000
Nkx2-5	Homebox protein Nkx-2.5 TGCCACTTTA	-1891	(+)	1.000
POU3F2	POU domain, class 3, transcription factor 2 ATTTACATAA	-1810	(-)	1.000
OSE2	Osteoblast Specific Element 2 AACCAC	-1597	(+)	manual
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha AAGGAGGACAGCAAGACACAGGT	-1567	(+)	0.832
Nkx2-5	Homebox protein Nkx-2.5 TCAAGTGACT	-1540	(-)	1.000
Oct-1	Pou2f1 POU-Domain Class 2 AATGTAATCACAA	-1510	(+)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1380	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1377	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1374	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1371	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1367	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-1365	(-)	1.000
HNF3alpha	Hepatocyte Nuclear Factor 3 TGTTTGGTTTT	-1356	(+)	1.000
BRCA1:USF2	Breast cancer type 1 susceptibility protein homolog CAACCAAA	-1236	(-)	0.997
PEBP	Polyoma Enhancer Binding Protein 2 AAGTATGTGGTGATG	-1230	(-)	1.000
C/EBPalpha	CCAAT enhancer binding protein alpha/gamma homolog GTCTTCAGCAATTC	-1216	(-)	1.000
IPF1	Insulin Promoter Factor Synonym Pdx1Pancreatic Duedenal homebox 1 GAAATAATGGCA	-1175	(+)	1.000

C/EBPgamma	Leucine zipper transaction factor (chicken) CTTCTTAAATAAC	-1057	(-)	0.907
PPARγ :RXRα PPARγ	Peroxisome proliferator-activated receptor gamma RXRα Retinoic acid receptor alpha ATGAAGGTGTCTTTCTCCCAAAA	-1012	(-)	0.732
Msx	Homeobox protein MSX-1 (Msh homeobox 1-like protein) (Hox-7) (Hox-7.1) ATAATTG(G/C)	-966	(+)	manual
OG-2	Nobox OG-2 Homebox protein NOBOX TAATTG	-965	(+)	1.000
MAF	V-maf musculoaponeuretic fibrosarcoma oncogene homolog (avian) TACTGAGTCAT	-932	(+)	1.000
AP-1	Transcription factor AP-1, Activator protein 1, Proto-oncogene c-jun, Gene name: Jun TGAGTCAT	-929	(+)	1.000
PPARα:RXRα	Peroxisome proliferator-activated receptor alpha RXRα Retinoic acid receptor alpha GACGTAGAGGGCAGAGGTAC	-862	(+)	0.899
GATA-X	GATA Binding Factor 1 Erythroid transcription factor CGCTCTTATCT	-825	(-)	1.000
HNF4	Hepatocyte nuclear factor 4 GGAGCAAAGCCCAG	-808	(+)	1.000
YY1	Yin and Yang 1 (synonym NMP1) CCAGCCATGTT	-798	(+)	1.000
YY1	Yin and Yang 1 (synonym NMP1) GCCATGTTG	-795	(+)	1.000
CdxA	CDX1 is a caudal-type homeobox intestine-specific transcription factor TATTAAT	-754	(-)	1.000
Oct-1	Pou2f1 POU domain, class 2, transcription factor 1 POU= Pit-Oct-Unc CAGTAGAATATTCTA	-670	(-)	0.992
Oct-1	Pou2f1 POU domain, class 2, transcription factor 1 POU= Pit-Oct-Unc TAGAATATTCTAAAT	-667	(+)	0.992
LEF1,TCF1	Lymphoid enhancer-binding factor 1 T-cell-specific transcription factor 1 TGCATCAAAGA	-628	(-)	1.000
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-625	(+)	manual
PLZF	Promylocytic leukemia zinc finger TTCTTGCCAACTTAAATTTCTTTTTTTT	-607	(+)	0.979
AIRE	Autoimmune regulator TTTTTTTAATTGGTTAACTCCAGAC	-581	(+)	0.877
OG-2	Nobox OG-2 Homebox protein NOBOX TAATTG	-575	(+)	1.000

Hand1:E47	E12/E47 basic helix-loophelix transcription factor (the E2A gene product) AACTCCAGACAACTAT	-566	(-)	1.000
Tal-1beta:E47	E12/E47 basic helix-loophelix transcription factor (the E2A gene product) TTCAACATCTGGTCTA	-494	(-)	1.000
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-463	(+)	manual
GATA-1	GATA binding Factor 1 AGATAA	-450	(+)	manual
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-412	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-407	(-)	1.000
CACD	Central Alveolar Choroidal dystrophy GGGTGTGG	-403	(-)	1.000
Pax-4	Paired box protein GGTGTGGTGGTGGTAGAAGATTTCTTTTAC	-402	(-)	0.879
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-397	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-394	(-)	1.000
CDP CR3	CCAT Displacement Protein = Cux1 CAATAAACATGAGGG	-370	(-)	0.996
HFH1(FOXQ1)	HNF-3/Forkhead homolog 1 AGATAAACATTT	-311	(-)	1.000
GATA-1	GATA binding Factor 1 AGATAA	-310	(+)	manual
FAC1	Embryonic Factor 1 (human): Bromodomain PHD finger transcription factor TCACAAAACAGATA	-298	(+)	0.978
GATA-1	GATA binding Factor 1 AGATAA	-289	(+)	manual
vMyb	Myb proto-oncogene protein ACCGTTTAC	-270	(-)	1.000
OSE2	Osteoblast Specific Element 2 CACCAA	-244	(+)	manual
Sox	SRY-related HMG boxes (A/T)AACAA(T/A)	-228	(+)	manual
IPF1	Insulin Promoter Factor Synonym Pdx1Pancreatic Duedenal homebox 1 AAAATAATGAGA	-146	(+)	1.000
Gli1	Glioma-associated oncogene homolog GAGCCTGCA	-136	(+)	manual

CDP CR3	CCAT Displacement Protein = Cux1 CAATACAAGGGTGTG	-108	(-)	0.996
Msx	Homeobox protein MSX-1 (Msh homeobox 1-like protein) (Hox-7) (Hox-7.1) ATAATTG(G/C)	-91	(+)	manual
OG-2	Nobox OG-2 Homebox protein NOBOX TAATTG	-90	(+)	1.000
LEF1	Lymphoid enhancer-binding factor 1 CACTTTGATT	-53	(-)	1.000
Kid-3	Kidney, ischemia, and developmentally-regulated protein 3 = Zinc finger protein 354c and AJ18 GGTGG	-43	(-)	1.000