

Supplementary Table 1: Putative binding sites of different transcriptional factors in Malpura sheep MSTN gene.

Family		Matrix		Binding site sequence
Name	Description	Name	Description	
RBP2	Retinoblastoma-binding proteins with demethylase activity	PLU1_JARID1B.01	Jumonji, AT rich interactive domain 1B	GCACagtac
RU49	Zinc finger transcription factor RU49, zinc finger proliferation 1 - Zipro1	RU49.01	Zinc finger transcription factor RU49 (zinc finger proliferation 1 - Zipro 1)	cAGTAct
BCL6	POZ domain zinc finger expressed in B-Cells	BCL6.02	POZ/zinc finger protein, transcriptional repressor, translocations observed in diffuse large cell lymphoma	acagtacTAGAaaggag
HEAT	Heat shock factors	HSF1.01	Heat shock factor 1	tggcacagtactAGAAaggagaaaa
		HSF2.02	Heat shock factor 2	ttccataaagaaAGAAaaatccttt
HOMF	Homeodomain transcription factors	HMX2.02	Hmx2/Nkx5-2 homeodomain transcription factor	agctgaggAAACgtttggt/ tgggtaacAAACatttct
		HMX2.02	Hmx2/Nkx5-2 homeodomain transcription factor	tgggtaacAAACgtttct
NFAT	Nuclear factor of activated T-cells	NFAT.01	Nuclear factor of activated T-cells	agctgaGGAAacgtttgtt
HNF1	Hepatic Nuclear Factor 1	TCF2.01	Hepatocyte nuclear factor 1 beta (HNF1B)	aaacgtttGTTAcccat
		HNF1.04	Hepatocyte nuclear factor 1 alpha (Tcf-1)	aaatgtttGTTAcccat

ETSF	Human and murine ETS1 factors	PEA3.01	Polyomavirus enhancer A binding protein 3, ETV4 (Ets variant gene 4)	aagtaaaAGGAagcagcaaga
		SPI1.04	SPI-1 proto-oncogene; hematopoietic transcription factor PU.1	aaagctgaGGAAatgtttgtt
		SPIB.01	Spi-B transcription factor (Spi-1/PU.1 related)	aagtaaaaGGAAgaagtaaga
		SPI1.01	SPI-1 proto-oncogene; hematopoietic transcription factor PU.1	taaaaggaAGAAgtaagagca
XBBF	X-box binding factors	RFX4.03	Regulatory factor X 4	gtcGTTGctctgcactagc
		RFX5.01	Regulatory factor X, 5 (influences HLA class II expression)	gctagtgcagAGCAacgac
CREB	cAMP-responsive element binding proteins	E4BP4.01	E4BP4, bZIP domain, transcriptional repressor	actaaactatGTAAcatgaat
MYBL	Cellular and viral myb-like transcriptional regulators	MYBL2.01	v-mybmyeloblastosis viral oncogene homolog (avian)-like 2 (BMYB), dimeric binding site	aaacgtttgTTACccatcata
STAF	SelenocysteinetRNA activating factor	STAF.01	Se-CystRNA gene transcription activating factor	gaaacgtttgtaCCCAcataaaattcct
CP2F	CP2-erythrocyte Factor related to drosophila Elf1	CP2.01	CP2	tcCTTGctcttgctgcttc
DMRT	DM domain-containing transcription factors	DMRT3.01	Doublesex and mab-3 related transcription factor 3	cattcatgtTACAtagtttag

PARF	PAR/bZIP family	VBP.01	PAR-type chicken vitellogenin promoter-binding protein	ctaaactatGTAACatg
BRN5	Brn-5 POU domain factors	BRN5.01	Brn-5, POU-VI protein class (also known as emb and CNS-1)	atgttaCATAgtttagtatgaca
		BRN5.03	Brn-5, POU-VI protein class(also known as emb and CNS-1)	aTAAAgaaagaaaaatcctttt
		POU6F2.01	Retina-derived POU-domain factor-1, dimeric binding site	ataataaactgATGAtatcttac
		TST1.01	POU-factor Tst-1/Oct-6	acagtATTAgaaaggagaa
TALE	TALE homeodomain class recognizing TG motifs	MEIS1.01	Binding site for monomeric Meis1 homeodomain protein	ggtcagacTGTCattgt
	HOX - MEIS1 heterodimers	MEIS1B_HOXA9.01	Meis1b and Hoxa9 form heterodimeric binding complexes on target DNA	TGACagtctgacct
EREF	Estrogen response elements	ER.03	Estrogen response elements (ER alpha), IR3 sites	caatgacagtctGACCcta
		ER.04	Estrogen response elements (ER alpha), IR3 sites	taggGTCAgactgtcattg
HOXF	Paralog box genes 1-8 from the four hox clusters A, B, C, D	NANOG.01	Homeobox transcription factor Nanog	taacatgAATGctatgcaa
		HOXC8.01	Homeobox C8 / Hox-3alpha	ttaataATGActccttgt
GATA	GATA binding factors	GATA2.02	GATA-binding factor 2	gggaGATAgtagc/ gtaaGATAcatc

OCT1	Octamer binding protein	OCT1.04	Octamer-binding factor 1	agTATGacaactata
SORY	SOX/SRY-sex/testis determining and related HMG box factors	SOX1.01	SRY (sex determining region Y)-box 1, dimeric binding sites	ttaCAATgacagtctgaccctaa
		SOX5.01	Sox-5	tgcttaCAATgacagtctgacc/ aattaaCAATtgaagatatca
		SOX13.01	SRY-related HMG-box gene 13	tcagaATAAataactgatgat
		SOX2.01	SRY-box containing gene 2	tgcttACAAatggcagtctgacc
		SOX9.03	SRY (sex determining region Y)-box 9 homodimer	ttACAAatggcagtctgaccctaa
VTBP	Vertebrate TATA binding protein factor	LTATA.01	Lentivirus LTR TATA box	tcgTATAaataaaaagtt/ ctaTATAacacgaatgc
		VTATA.02	Mammalian C-type LTR TATA box	aatcaTAAAacctttta/ tataaTAAAaggtttta
		VTATA.01	Cellular and viral TATA box elements	aactaTATAacacgaat
ABDB	Abdominal-B type homeodomain transcription factors	HOXD10.01	Homeobox D10	tcgtataaTAAAaagtt
		HOXD12.01	Homeobox D12 / Hox-4H	tgatcctTAAActata
CDXF	Vertebrate caudal related homeodomain protein	CDX1.01	Intestine specific homeodomain factor CDX-1	aaaactTTTAttatcacga
		CDX2.02	Caudal type homeobox transcription factor 2	tcatcagtTTATtattctg
APIF	API1, Activating protein 1	FOSL2.01	FOS-like antigen 2 (FRA2)	caaggAGTCatta
FKHD		FHXB.01	Fork head homologous X binds DNA with a	cgtataATAAaaagttt

	Fork head domain factors		dual sequence specificity (FHXA and FHXB)	
		HFH2.01	HNF-3/Fkh Homolog 2 (FOXD3)	gggtaacaAACAttcc
AP1R	MAF and AP1 related factors	BACH1.01	BTB/POZ-bZIP transcription factor BACH1 forms heterodimers with the small Maf protein family	taccacaaGGAGtcattattaaaga
PROX	Prospero-related homeobox	PROX1.01	Prospero homeobox protein 1, dimeric binding site	aatGACTcctgt
CEBP	Ccaat/Enhancer Binding Protein	CEBPB.01	CCAAT/enhancer binding protein beta	aagctgagGAAAtgt
BARB	Barbiturate-inducible element box from pro+eukaryotic genes	BARBIE.01	Barbiturate-inducible element	ataaAAAGTtttatg
MYT1	MYT1 C2HC zinc finger protein	MYT1.02	MyT1 zinc finger transcription factor involved in primary neurogenesis	aaaAAGTtttatg
YY1F	Activator/repressor binding to transcription initiation site	YY2.02	Transcription factor yin yang 2	atacagCCATcacgaaccataa
CART	Cart-1(cartilage homeoprotein 1)	XVENT2.01	Xenopus homeodomain factor Xvent-2; early BMP signaling response	cagaaTAATAaactgatgata
SATB	Special AT-rich sequence binding protein	SATB1.01	Special AT-rich sequence-binding protein 1, predominantly expressed in thymocytes, binds to matrix attachment regions (MARs)	aatAATAaactgatg

HAND	Twist subfamily of class B bHLH transcription factors	LYL1_E12.01	LYL1-E12 heterodimeric complex	taataaactGATGatattcta
SIXF	Sine oculis (SIX) homeodomain factors	SIX1.01	Sine oculishomeobox homolog 1	tgtaagaTATCatca
NKRF	Nuclear factor-kappaB repressing factor	NKRF.01	NFKB repressing factor (NRF)	attTCCTcagc
NACA	Nascent polypeptide associated complex and coactivator alpha	NACA1.01	Nascent polypeptide-associated complex subunit alpha 1	agggCAGAgcaac
SNAP	snRNA-activating protein complex	PSE.02	Proximal sequence element (PSE) of RNA polymerase III-transcribed genes	gtcatCCTAaactatataa
HMTB	Human muscle-specific Mt binding site	MTBF.01	Muscle-specific Mt binding site	tggtATCTt

