ChIP primers	Primer	amplicon
mMmp13 TSS ChIP S	TGCCACAAACCACACTTAGGA	137bp
mMmp13 TSS ChIP AS	CCCAGGGCAAGCATCTTCTAT	
mMmp13 -2kb ChIP S	TTCTCCAAGAACAATGCCCCA	119bp
mMmp13 -2kb ChIP AS	TGTTAGCACGAGTTCTGCCAT	
mMmp13 -10kb ChIP S	AGGCCAACTGGTTCAAAGGAA	129bp
mMmp13 -10kb ChIP AS	CAGCGTGTGACTTCAGATTGC	
mMmp13 -20kb ChIP S	CCACCAGACTTCCTACCAAGC	148bp
mMmp13 -20kb ChIP AS	AGCCACCAACTGGAATTAGCA	
mMmp13 -30kb ChIP S	TGCTCAGAGGCAGTTGAGAAG	216bp
mMmp13 -30kb ChIP AS	ATAGGTTAGATCCCCAGCGGT	
mMmp13 +5 Intr Con ChIP S	GCATAAACGTGATGGTGGCAA	129bp
mMmp13 +5 Intr Con ChIP AS	GTTGGGCAGTAACCCCATACT	
mMdfi -8kb ChIP S	CTGACTCACACATGACCCCTT	243bp
mMdfi -8kb ChIP AS	TCGAGGACAGTTGTATGTGCC	

Cloning Primers	Primer	amplicon
mMmp13 TSS H3 S	CTCATCAAGCTTTAACCATTTTGTGGACAGAACTTTGTC	508bp
mMmp13 TSS BHI AS	GGGGCAGGATCCAACAGGGAGTCCAGCTCAACAAGAAG	
mMmp13 -2kb H3 S	AGCAGGAAGCTTTCATTCCTAATTTCATCCTAATGTTTTC	579bp
mMmp13 -2kb BHI AS	CATGTTGGATCCTTACAACATAAGCTCTCTGCAGAAG	
mMmp13 -10kb H3 S	CCTGTGAAGCTTAAGGATGCGCCTATGAAGGTTAGTC	910bp
mMmp13 -10kb BHI AS	GGGAAAGGATCCAAGGAAAGCAGGTAGTTAGGAAAGGAG	
mMmp13 -20kb H3 S	GAATGTAAGCTTGTACAAAACAAAGAGACAGAATTCTTAG	482bp
mMmp13 -20kb BHI AS	TTATGAGGATCCTACCTCATTGATACAAATGTTTCCCC	
mMmp13 -30kb H3 S	CACTAAAAGCTTGAGGAGTGAGAGACAGTAAGGATGGG	457bp
mMmp13 -30kb BHI AS	ATTGTCGGATCCTTCTCTCTTCTACCAGCTATGGTGGG	
mMmp13 +5 Intr Con H3 S	ACATTGAAGCTTGCTGCCAGAAGAACCTCTTGTGGGCC	553bp
mMmp13 +5 Intr Con BHI AS	CCACACGGATCCTTCTTTGACAATTTCAACAACTATTG	
LeGO-RUNX2-P2A-GFP-F	AGCTCCTCGCCCTTGCTCACCATGGTGGCGAGGACCGGGGTTTTCT TCCACGTCTCCTGCTTGCTTTAACAGAGAGAAGTTCGTGGCTCCGG ATCCATATGGCCGCCAAACAGACTCATCCATTCT	
LeGO-RUNX2-P2A-GFP-R	AGCTCCTCGCCCTTGCTCACCATGGTGGCGAGGACCGGGGTTTTCT TCCACGTCTCCTGCTTGCTTTAACAGAGAGAAGTTCGTGGCTCCGG ATCCATATGGCCGCCAAACAGACTCATCCATTCT	
10k-VDRE1-MUT-F	GTCCTGGCCTTTTTTGAGCGGGTTCACATTAGGGGAAA	
10k-VDRE1-MUT-R	TTTCCCCTAATGTGAACCCGCTCAAAAAAGGCCAGGAC	
10k-VDRE2-MUT-F	CTGAGGCCAACTTTTTTAAAGGAATTAATCTGGATG	
10k-VDRE2-MUT-R	CATCCAGATTAATTCCTTTAAAAAAGTTGGCCTCAG	
30k-Runx2-2-MUT-F	TCACAATTTTATGACTTTTTTTAAGATTCCTGGCAAAATT	
30k-Runx2-2-MUT-R	AATTTTGCCAGGAATCTTAAAAAAAGTCATAAAATTGTGA	
30k-Runx2-1-MUT-F	AGATTCCTGGCAAAATTGAAACTTTTGGGGATCTAACCTA	
30k-Runx2-1-MUT-R	TAGGTTAGATCCCCAAAAGTTTCAATTTTGCCAGGAATCT	

TaqMan Genes	**ABI assay ID**
Beta-actin	4352341E
Gapdh	4352339E
Mmp13	Mm00439491_m1
Spp1 (Opn)	Mm00436767_m1
Runx2	Mm00501584_m1
Sp7 (Osx)	Mm04209856_m1
Rankl (Tnfsf11)	Mm00441906_m1
Vdr	Mm00437297_m1

CRISPR guide cloning primers	**primers**
Mmp13-Pro-G1-S	CACCGTTCTGCCACAAACCACACTT
Mmp13-Pro-G1-AS	AAACAAGTGTGGTTTGTGGCAGAAC
Mmp13-Pro-G2-S	CACCGCCTTCAAGGAAATACAGCA
Mmp13-Pro-G2-AS	AAACTGCTGTATTTCCTTGAAGGC
Mmp13-10k-G1-S	CACCGGTCCTGGCCTTAGGTGAGC
Mmp13-10k-G1-AS	AAACGCTCACCTAAGGCCAGGACC
Mmp13-10k-G2-S	CACCGCTGAGGCCAACTGGTTCAA
Mmp13-10k-G2-AS	AAACTTGAACCAGTTGGCCTCAGC
Mmp13-30k-G1-S	CACCGAGAAGCAACCTACCTACTCA
Mmp13-30k-G1-AS	AAACTGAGTAGGTAGGTTGCTTCTC
Mmp13-30k-G2-S	CACCGCTGTAGCCCTCGTGAGTCC
Mmp13-30k-G2-AS	AAACGGACTCACGAGGGCTACAGC
Mmp13-VDR-G1-S	CACCGCGGTCAAAGTCACCAGGGTC
Mmp13-VDR-G1-AS	AAACGACCCTGGTGACTTTGACCGC
Mmp13-VDR-G2-S	CACCGAGTGTGTGGAGACCGAGCCA
Mmp13-VDR-G2-AS	AAACTGGCTCGGTCTCCACACACTC
Mmp13-RUNX2-G1-S	CACCGCTGTGGTTACCGTCATGGCC
Mmp13-RUNX2-G1-AS	AAACGGCCATGACGGTAACCACAGC
Mmp13-RUNX2-G2-S	CACCGCCCATCTGGTACCTCTCCGA
Mmp13-RUNX2-G2-AS	AAACTCGGAGAGGTACCAGATGGGC