## Figure S1

>D1 MucMuc	chr11 66933250-66933440
>FI Musmus	MEF3 1 EBOX
MusMus	GTCACTCACCTCTTGGGTAACTGGAGCCCCTCAGCTGTTTGGGTCCTGCTTTGGAAGGACATTCCAGTGT
RatNor	GTCACTCACATCTTGGGTAACTGGAGCTCCTCAGCTGTTTGGGTCTTGGTTTGGAAGGACATTCCAGTGT
HomSap	GTCACTCCCCTCTAGGGTAACTGGAGCCCTTCAGCTGTTTGGGTGCCTGTTTGAAAGGACATCTCAGCAT
BosTau	GTCACTCACGTCTTGGGTAACTGGAGCCCTTCAGCTGTTTGGGTCCCTGTTTGGAAGGACGTCTCAGCAT
EquCab	GTCACTCACTTCTTGGGTAACTGGAGCCCTTCAGCTGTTTGGGTCCCTGTTTGGAAGGACATCTCAGCAC
_	EBOX MEF3 2
MusMus	TGTCCTG-GCTCCTGGAACAGCCAGCCTCCCAGAGGGCTTCACCTGTCAAAGCTAGGGGGTTGACTTAGA
RatNor	TGTCCTG-GCTCCTGGAACAGCTAGCCTCCCAGAGGACTTCACCTGTCAAAGCTG-GGGGTTGACTTAGA
HomSap	CACCCAGGGCTCCCGGGACAGCCAACCTCCCAGAAGGCTTCATCTGTCAGAGCAG-GAG-CTTACTTAGA
BosTau	TGCCCAGGGCTCTGGGGGCCAGCCAACTTCTCAGAAGGTTTCATCTGTCAGCCCAA-GAGGCTGACTTAGC
EquCab	TTTCTGGGGCTCCTGGGGCGGCCAACTGCCCACAAGGCTTCATGTGTCAAAGCAG-GAGGCTGACGCAGA
MusMus	TTTC CTTATGAGCACTCTGTAAGAGAAACTGAAATAAAATA
RatNor	TTTCCTTATGAGAACTCTGTAAGAGAAATCGAAATAAAATAAAT
HomSap	ATTCCTTACAAGAACACTGCAAGAGCAATTAAAATAAGTTATCT
BosTau	TTTCCTCAGAAGAACTTTCCAAGAGCAATTAAAATAAGCTATCT
EquCab	TCTCCTTACAAGAACTTTGCGCGA <mark>GCAATGAAA</mark> GTTACCT
>D2 MileMile	chr11 66934405-66934621
MEF3 4	
MusMus	CTTGATCCCTCTGGGGTAAGAAATCTGACGACAGGGTGAGCCTGCCAGGCGTGGCCTCTTGACTCTGA
RatNor	CTTGATCCCTCTGGGGTAAGAAATCCGAGGACAGGATGAGCCTGCCAGGCATGGCCTCTTGACTCTGA
HomSap	CTTGATCCCCATGGGGTAAGAAATCTGAGGACAGAATGAGCCTGCCAGCCA
BosTau	CTTGATCCCCACATGGAAAGAAATCTGAGGACAGAATGAGCTTCTCCGTGTCCTCCCCACACTGCAA
EquCab	CTTGATCCCTGTGGGGAAGGAAATCTGAGGACATTGCAA
_	MEF3 5
MusMus	ATCTGGCTGAGAGATGGGCCCGGAGTTACAGCTCCTGCTGGGAATGTTCTCAGAAACTCTATCAG <mark>GT</mark>
RatNor	ATCTGGCTGAGAGCTGGGGCCAGAGCTACAGCGCCTGCTGGGAATGTCCTCAGAAACTCTATCAG <mark>GT</mark>
HomSap	ATCTGGCCAAGGGATGGGGCTGAACTTGCAAATCCCTCCGGGGCTATTCTCAGAAACCAAGTGATGGG <mark>G</mark> A
BosTau	${ t ACTTGGCCAAGGGATGGGGCCGAAGCTGTAAATCCCATCGGGGCTGTTCTCAGAAATCAAGTGGTGGGGTT}$
EquCab	ATCTGGCCAAGAAATGGGGCCAAAGCTGTAAATCCCAACAGGGCTGTTCTCAGAAACCAAGCCATGGGAT
	EBOX MEF3 6
MusMus	CAGGCGACCTCAGTTGATCTGCCCGACCCTGGGTTTCTCGGTCGACCCTCGTCAAGGAAACCTT
RatNor	CAAGCGACCTCAGTTGATCTGCCCGACACTGGGTTTCTCTGTCGACCCTCGTCAAGGAAACCGA
HomSap	AACCTGACCTCAGCTGATCTACCTGATATGCTGGGTTTCTCTACTGACCCTGACCAAGGTAATGTT
BosTau	TACCTGACCTCAACTGATCTACCCAACTCCGGACTTCTGCACTGACC-TGACCAAGGAGACCTGGCCT
EquCab	CATCTGGCCTCAATTGATCTACCTGACCCTGGGCTTCTCTAGCAACCCCGACCAAGGAAATGTT
MusMus	ATTCCATCATGTTATTCT
RatNor	ACTCAATTCCGTCATGCTATACT
HomSap	ATTATCAATCATACGTTATTCA
BosTau	ATATCATCAATCATAGGTTTCCCA
EquCab	ATCAATCATATGTTATTCA