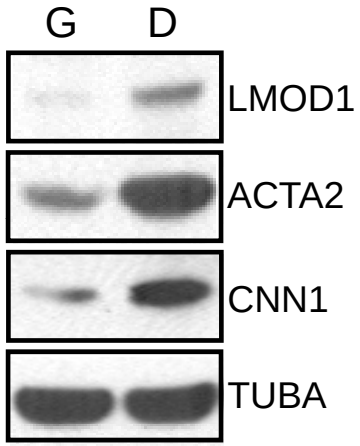
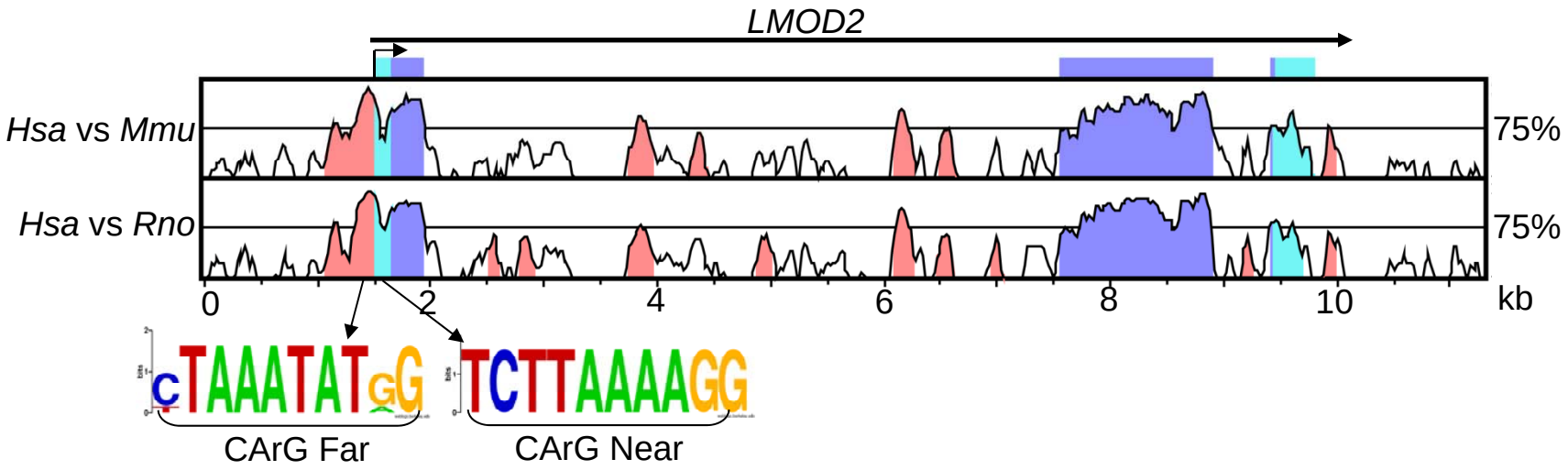
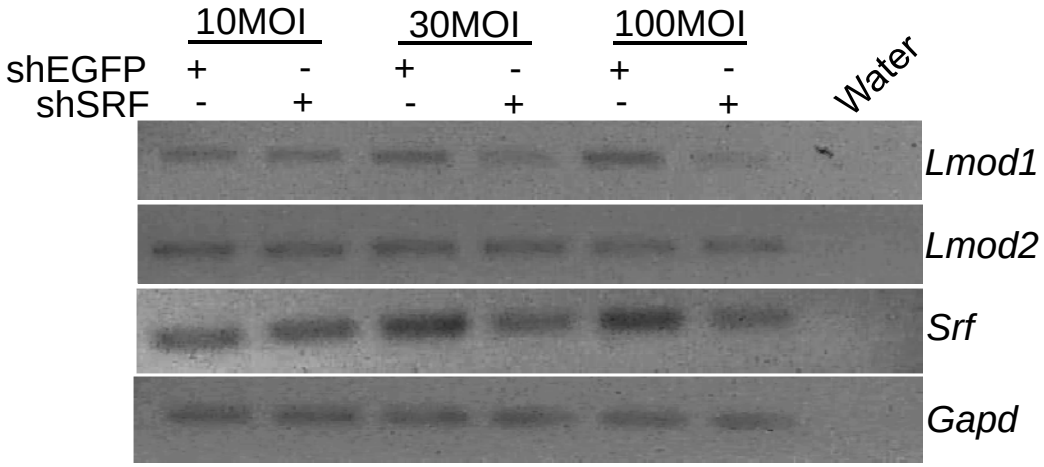
Nanda and Miano Supplemental Figure 1



Nanda and Miano Supplemental Figure 2



Nanda and Miano Supplemental Figure 3



Supplemental Figure Legends

Supplemental Figure 1. LMOD1 protein expression in HCASM. Western blot of LMOD1 from either growing (G) or differentiating (D) HCASM. Increases in LMOD1 with differentiation are accompanied by similar elevations in other SMC-restricted proteins (ACTA2, CNN1).

Supplemental Figure 2. Comparative genomic analysis of human *LMOD2* gene. VISTA plot revealing *Leiomodin2* sequence homology between human (*Hsa*) and mouse (*Mmu*) and human (*Hsa*) and rat (*Rno*) over a 10-kb genomic interval, similar to that of *Leiomodin1* VISTA illustrated in Fig. 3A. Sequence logos of two CArG-like elements identified near the annotated transcription start site of *LMOD2* are shown below the VISTA plots. Each logo represents sequence conservation across six vertebrate species.

Supplemental Figure 3. *Lmod1* and *Lmod2* mRNA expression following *Srf* knock down in C_2C_{12} cells. RT-PCR analysis of *Lmod1*, *Lmod2* and *Srf* mRNA expression in differentiated C_2C_{12} cells transduced with increasing amounts of either shEFGP or shSRF for 72 h.

Supplemental Table1. List of Primers and Applications

Gene		Primer Sequence	Application	Product size (bp)
Lmod1 (mouse and rat)	Fwd Rev	GGAATCAAACGGACAAACAGCCCT CTCCTCTTTCTTGCTGGGCTCCTT	RT-PCR	500
Lmod2 (mouse and rat)	Fwd Rev	GATAC***GGATCC***AGGGAGCTGGAAGACATTGAACCT GATAC***AAGCTT***GTTCTTCCACTGTTGCCGTTGGTT	RT-PCR	457
Lmod3 (mouse and rat)	Fwd Rev	GATAC***GGATCC***ATGGAAGTCATGGCCCCTGACC GATAC***AAGCTT***TCAATGTTGTTCAGGTTGAGTTCCTTCATGTC	RT-PCR	711
Cnn1 (mouse)	Fwd Rev	ACTGGGTACAGATCAGCCTCT TAGGCAGAGTTGTAGTAGTTG	RT-PCR	318
Gapd (mouse and rat)	Fwd Rev	CGTGCCGCCTGGAGAAAC TGGGAGTTGCTGTTGAAGTCG	RT-PCR and qPCR	136
Lmod1 (mouse and rat)	Fwd Rev	CAGAGGAATCAAACGGACAAACAG GCTTGCTTTCATCCACAGACATC	qPCR	120
WT *LMOD1* promoter (human)	Fwd Rev	GATAC***CTCGAG***GTAAAATACGCTCTTGAACGTGC GATAC***AAGCTT***CTTGGCAAAATGGGCTGTG	PCR cloning	540
WT *LMOD2* promoter (human)	Fwd Rev	GATAC***CTCGAG***TAAGTACAGGCACTAATGTACACC GATAC***AAGCTT***TTGTCAGACCCAGAAGGAGCTTGA	PCR cloning	922
WT *CNN1* Intronic CArG (human)	Fwd	GCCGCCGCGCCTTATAAGGCGGCCTTGG CCAAGGCCGCCTTATAAGGCGCGGCGGC	EMSA	
WT *LMOD1* CArG Far (human)	Fwd Rev	GGCCCCTTGTCTTTAAAAGGCTAAACTGCT AGCAGTTTAGCCTTTTAAAGACAAGGGGCC	EMSA	
Mutant *LMOD1* CArG Far (human)	Fwd Rev	GGCCCCTTGT**gtc**TAAAAGGCTAAACTGCT AGCAGTTTAGCCTTTTA**gac**ACAAGGGGCC	EMSA and mutagenesis	
WT CArG Near (human)	Fwd Rev	CTGCTCTGTACTAAATTTGGTCACGCAGCG CGCTGCGTGACCAAATTTAGTACAGAGCAG	EMSA	
Mutant CArG Near (human)	Fwd Rev	CTGCTCTGTA**gtc**AATTTGGTCACGCAGCG CGCTGCGTGACCAAATT**gac**TACAGAGCAG	EMSA and mutagenesis	
Srf (rat)	Fwd Rev	CCGTGCTCAATGCCTTCTC GTCCAAGTTCACCACCTGTAG	RT-PCR	215
Srf (mouse)	Fwd Rev	CCACCACAGACCAGAGAATGAG TCTTGAGCACAGTCCCGTTG	RT-PCR	285
LMOD1 (human)	Fwd Rev	ATTCACTCTCACCAGCTACCCAGA ATGTGGTCCCTGTGGGACATCTTT	RT-PCR	502
LMOD2 (human)	Fwd Rev	TCAAGCTCCTTCTGGGTCTGACAA CTCCCATTGCTGCCATTGGTCAAA	RT-PCR	578
GAPD (human)	Fwd Rev	CGCTCTCTGCTCCTCCTGTTC TTGACTCCGACCTTCACCTTCC	RT-PCR	103

Bold italicized font represents restriction enzymes immediately following the cloning clamp
Bold lowercase font represents mutations in CArG boxes for luciferase and EMSA