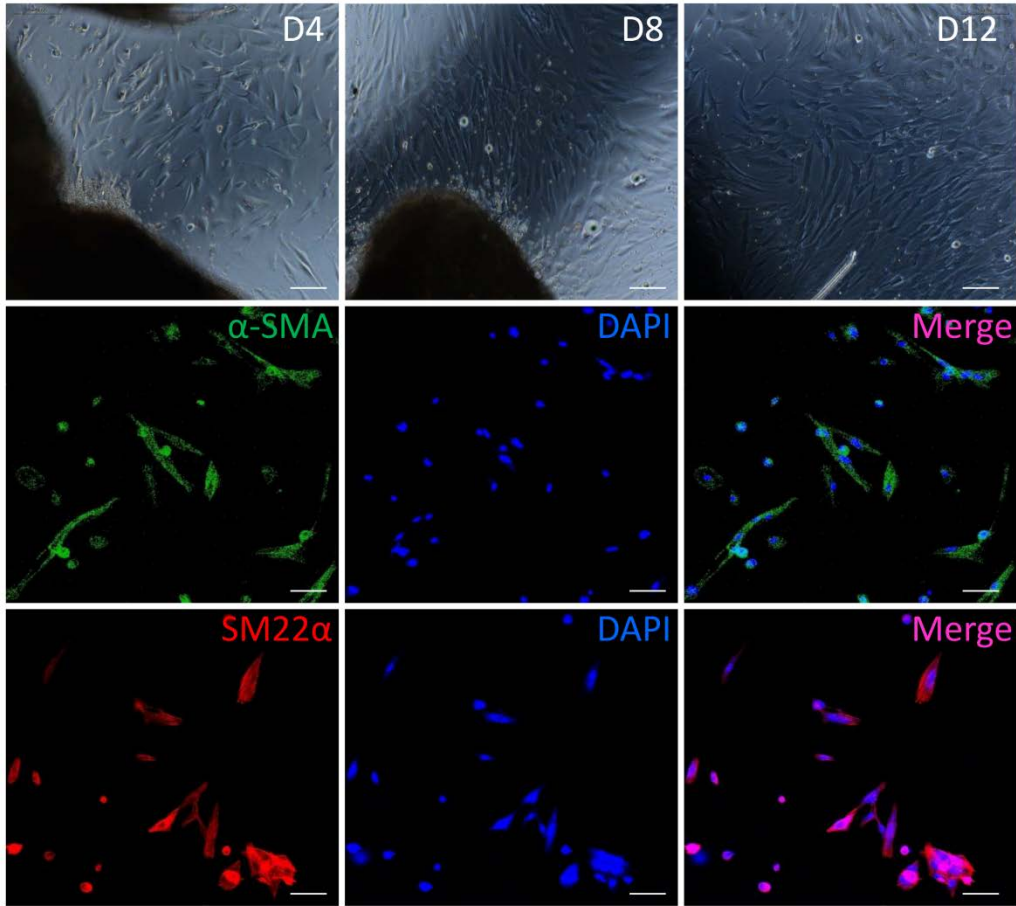


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Supplemental Information

MicroRNA-134-5p Regulates Media Degeneration through Inhibiting VSMC Phenotypic Switch and Migration in Thoracic Aortic Dissection

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Supplement figure 1. Morphology and identification for primary culture of AoSMCs.. Upper panel: Bright field graphs for primary culture of AoSMCs from tunica media of human normal aorta tissue in Day 4, Day 8 and Day 12. Middle panel: Representative confocal-microscopy images of primary AoSMCs with immunostaining using α -SMA antibody. Lower panel: Images of AoSMCs with immunostaining by SM22 α antibody. Green: α -SMA; Red:SM22 α ; Blue: DAPI. Scale bar: 100 μ m.

Supplement table 1. Primers of contractile markers, matrix metalloproteinases and vascular development target genes in RT-qPCR assay.

Gene	Species	Primer sequence	Amplicon size(bp)
<i>18S</i>	Human	5'- GTAACCCGTTGAACCCCAT -3' 5'- CCATCCAATCGGTAGTAGCG -3'	151
<i>α-SMA</i>	Human	5'- TCGCATCAAGGCCCAAGAAA -3' 5'- GGATTCCCCTCTTAGTCCCG -3'	210
<i>SM22α</i>	Human	5'- GAAACCCACCCTCTCAGTCAG -3' 5'- TTGGCCATGTCTGGGGAAAG -3'	299
<i>MYH11</i>	Human	5'- TCACGGGAGAGCTGGAAAAG -3' 5'- TTGGCTCCCACGATGTAACC -3'	151
<i>CNN1</i>	Human	5'- CCAGGAGCGAGATAAGACCT -3' 5'- TTGGGTCCCCATCTCTCTAGG -3'	183
<i>MMP2</i>	Human	5'- GCATCCAGACTTCCTCAGGC -3' 5'- CCATTAGCGCCTCCATCGTAG -3'	295
<i>MMP9</i>	Human	5'- CGACGTCTCCAGTACCGAG -3' 5'- TTGTATCCGGCAAACCTGGCT -3'	220
<i>MMP12</i>	Human	5'- CGGGCAACTGGACACATCTA -3' 5'- AGCTTCCGGATTGCGTAGT -3'	184
<i>ADAMTS-1</i>	Human	5'- TTCCCACATGATGGCGTCAA -3' 5'- CAGTGTGGAGTCCTCCCC -3'	219
<i>ADAMTS-4</i>	Human	5'- CCACCGGAGCATCTACTTGG -3' 5'- AAGAAGCTGTATCGGAGGCG -3'	240
<i>ADAMTS-7</i>	Human	5'- TGTGTCAACACCAGACAGG -3' 5'- CTCACAGCGGGGAGGCT -3'	125
<i>COL2A1</i>	Human	5'- CTGCATGAGGGCGCGGTA -3' 5'- CCAGTGTACAGACACAGATCC -3'	227
<i>VEGFA</i>	Human	5'- GCGGATCAAACCTCACCAAG -3' 5'- GCTCCAGGGCATTAGACAGC -3'	211
<i>STAT5B</i>	Human	5'- CGGGAGGAGAGTCGGCG -3' 5'- TTGGAGCTGCTGAGCTTGTA -3'	200
<i>SMAD6</i>	Human	5'- CACCGGAGGCACTTTTGT -3' 5'- GCACTTGGAGCGAGTTTCTC -3'	208
<i>ITGB1</i>	Human	5'- CCGCGGGAAAAGATGAAT -3' 5'- ATGTCATCTGGAGGGCAACC -3'	252
<i>MKNK1</i>	Human	5'- AAGATTGCCACCTACGCACA -3' 5'- TAGGCTCCCTCTCCAAGCAA -3'	283