

# HDAC6 regulates the MRTF-A/SRF axis and vascular smooth muscle cell plasticity

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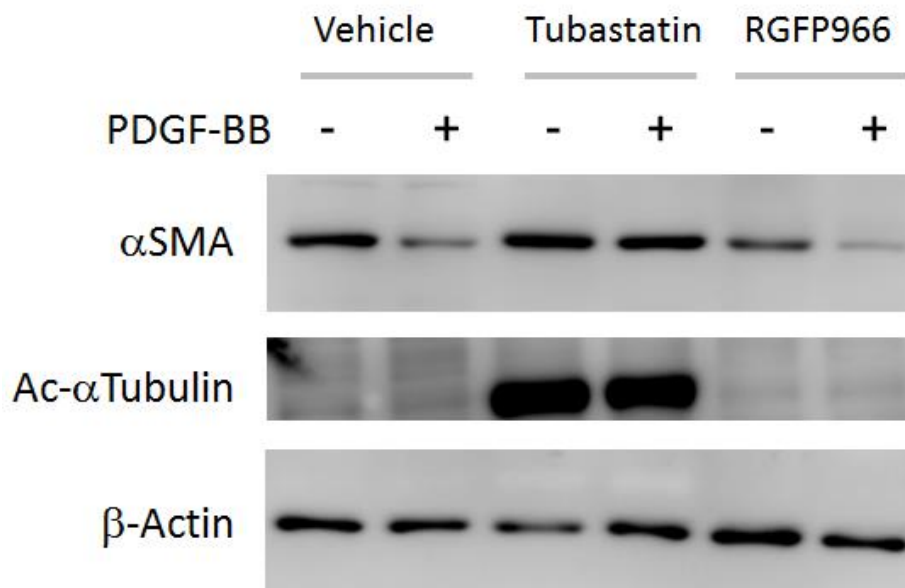
*Short title: HDAC6 regulates MRTF-A/SRF*

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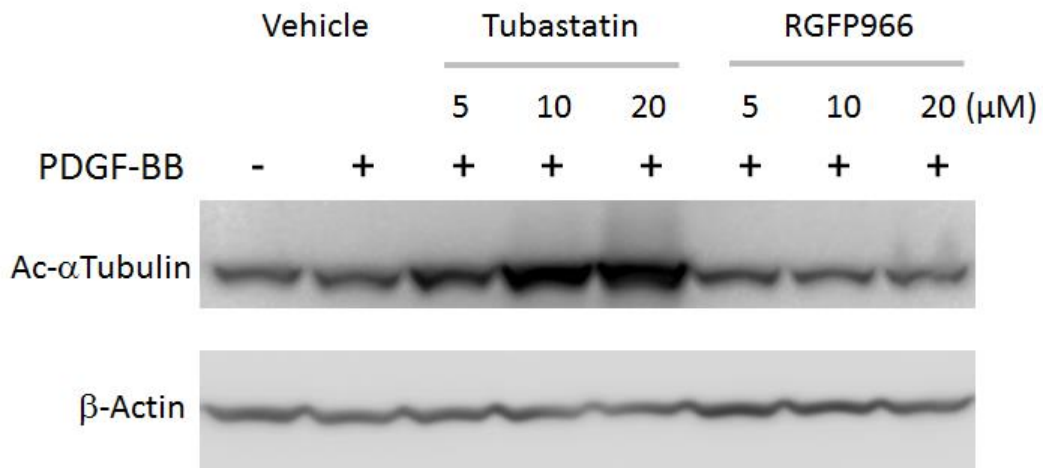
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## Supplemental figures



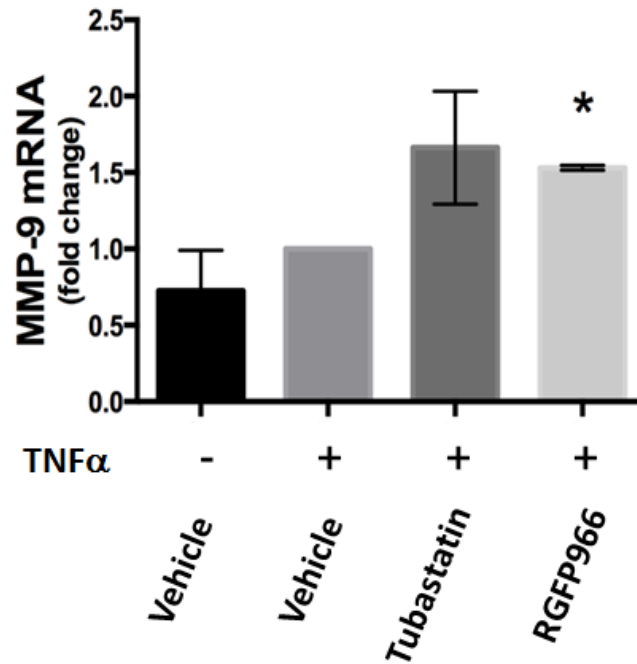
**Figure S1. HDAC6 inhibition but not HDAC3 inhibition maintains  $\alpha$ SMA protein levels in the absence and presence of PDGF-BB stimulation.**

MOVAS cells were starved with 0.5% FBS for overnight, and then pretreated with 5  $\mu$ M Tubastatin-A or 5  $\mu$ M RGFP966 or vehicle control (equal amounts of DMSO) for 2h prior to addition of 20 ng/ml PDGF-BB (or solvent). For Western blot assays, cells were collected 48h after PDGF-BB stimulation. Shown is one of two independent experiments with similar results. The blots were from the same polyacrylamide gel.



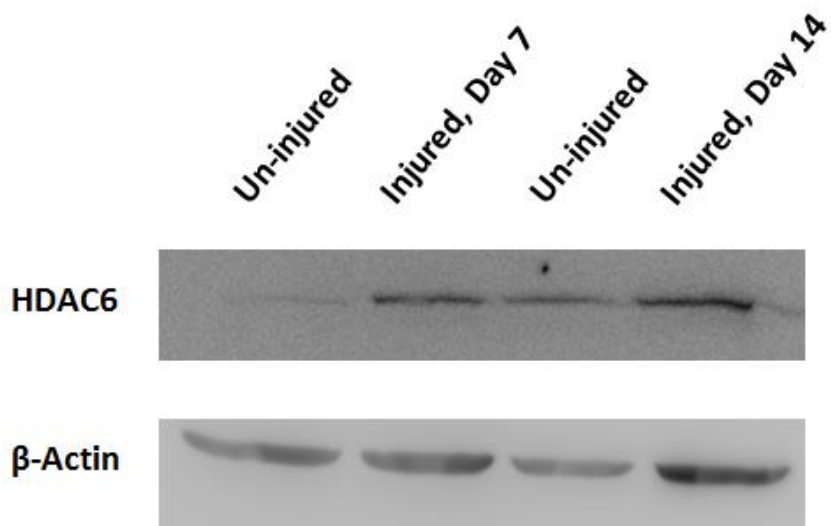
**Figure S2. Dose-dependent enhancement of tubulin acetylation by HDAC6 inhibitor**

MOVAS cells were pretreated with HDAC inhibitors and then stimulated with PDGF-BB as described in Figure 1. Cells after 48h PDGF stimulation were used for Western blotting. Shown is one of two independent experiments with similar results.



**Figure S3. Effects of HDAC6 and HDAC3 inhibitors on MMP9 mRNA levels.**

Experiments were performed as described in Figure 1D. Prior to qRT-PCR assay, MOVAS cells were pretreated with vehicle or inhibitors for 2h and then stimulated with TNF $\alpha$  for 4h. Data are normalized to the condition of vehicle+TNF $\alpha$ ; mean  $\pm$  SEM; n = 3; \*P<0.05.



**Figure S4. Up-regulation of HDAC6 in injured arterial wall**

Balloon angioplasty was performed as described for Figure 4. Carotid artery samples were collected at indicated time points and subjected to Western blotting for detection of HDAC6.