

Control of vascular smooth muscle cell proliferation and differentiation is important during development in the establishment and maintenance of the vasculature as well as in the pathology of post-natal atherosclerosis. In the highlighted manuscript we have identified a pathway implicating RhoA signaling in the control of MEF2 activity, a key transcription factor in vascular smooth muscle cells (VSMCs), through a small molecule called CPI17. Knowledge of this pathway may have important implications for our understanding of the control of VSMC gene expression and also provide a therapeutic target for manipulating pathological vascular stenosis.

Reference: Pagiatakis C, Gordon JW, Ehyai S, **McDermott JC**. [A novel RhoA/ROCK-CPI-17-MEF2C signaling pathway regulates vascular smooth muscle cell gene expression.](#) J Biol Chem. 2012 Mar 9;287(11):8361-70.

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