



## **Msx genes define a population of mural cell precursors required for head blood vessel maturation.**

Miguel Lopes, Olivier Goupille, Cécile Saint Clément, Yvan Lallemand, Ana Cumano, Benoît Robert

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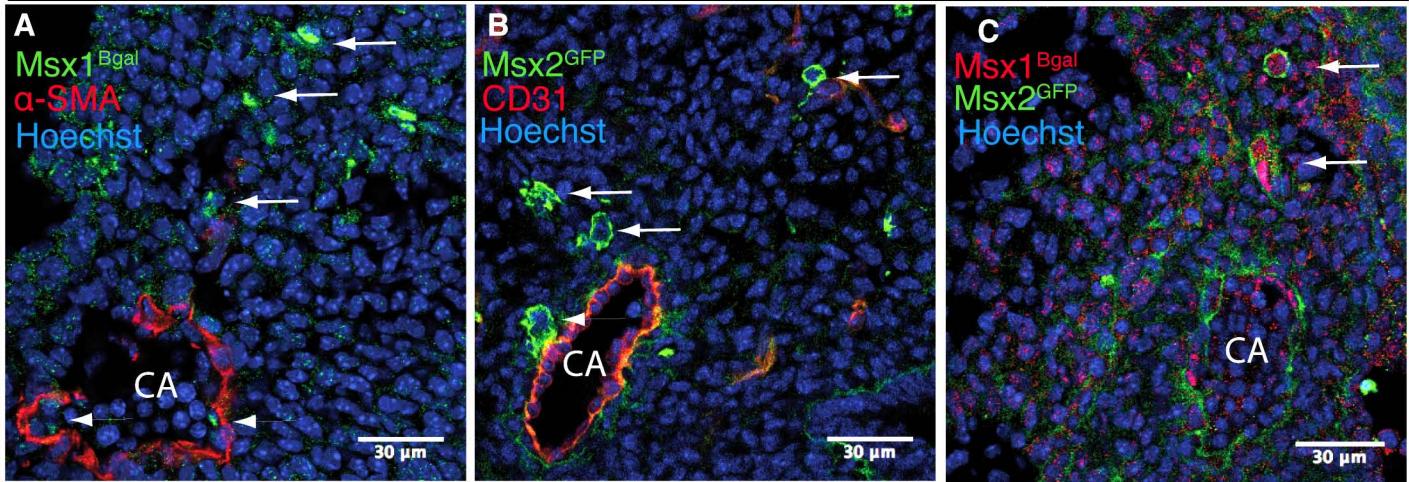
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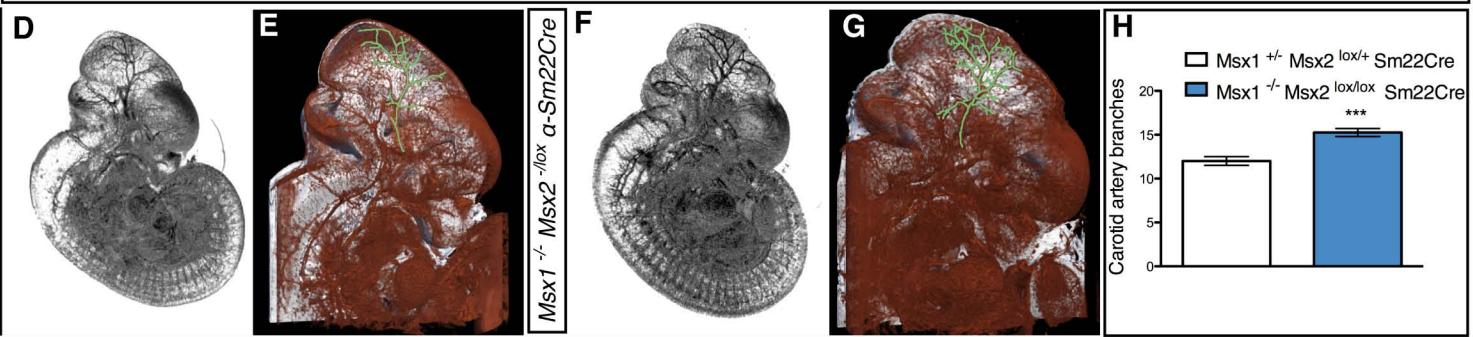
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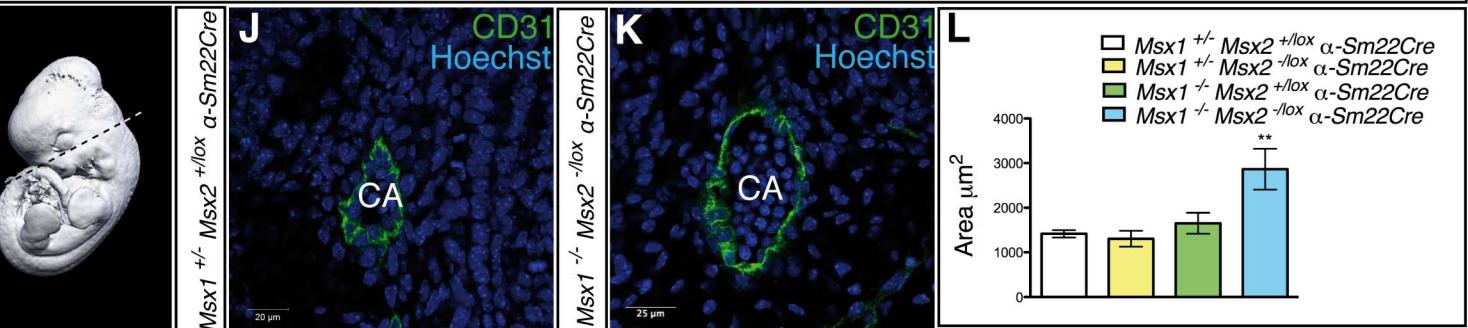
### Carotid artery transversal section - E11.5



### E11.5 - CD31



### Carotid artery transversal section - E11.5



### Dorsal Aorta transversal section - E11.5

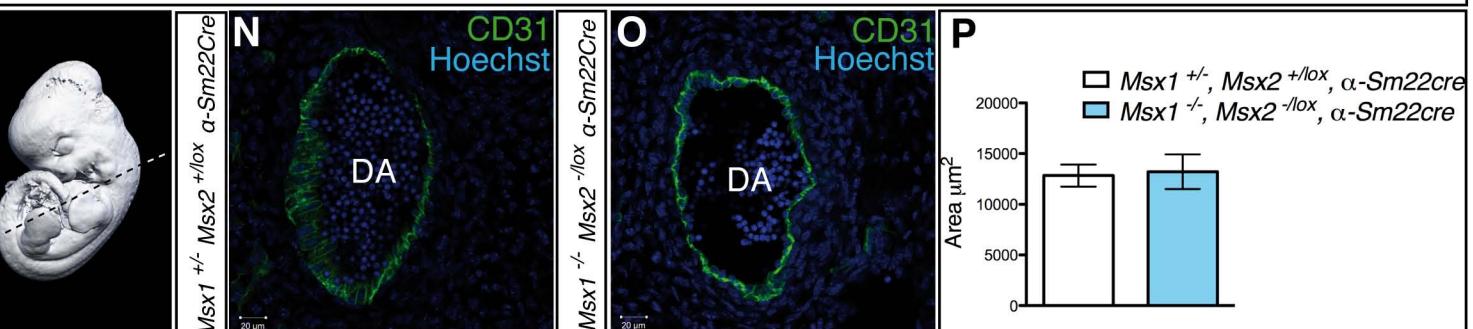


Figure 1

### Head Transversal Sections - E11.5

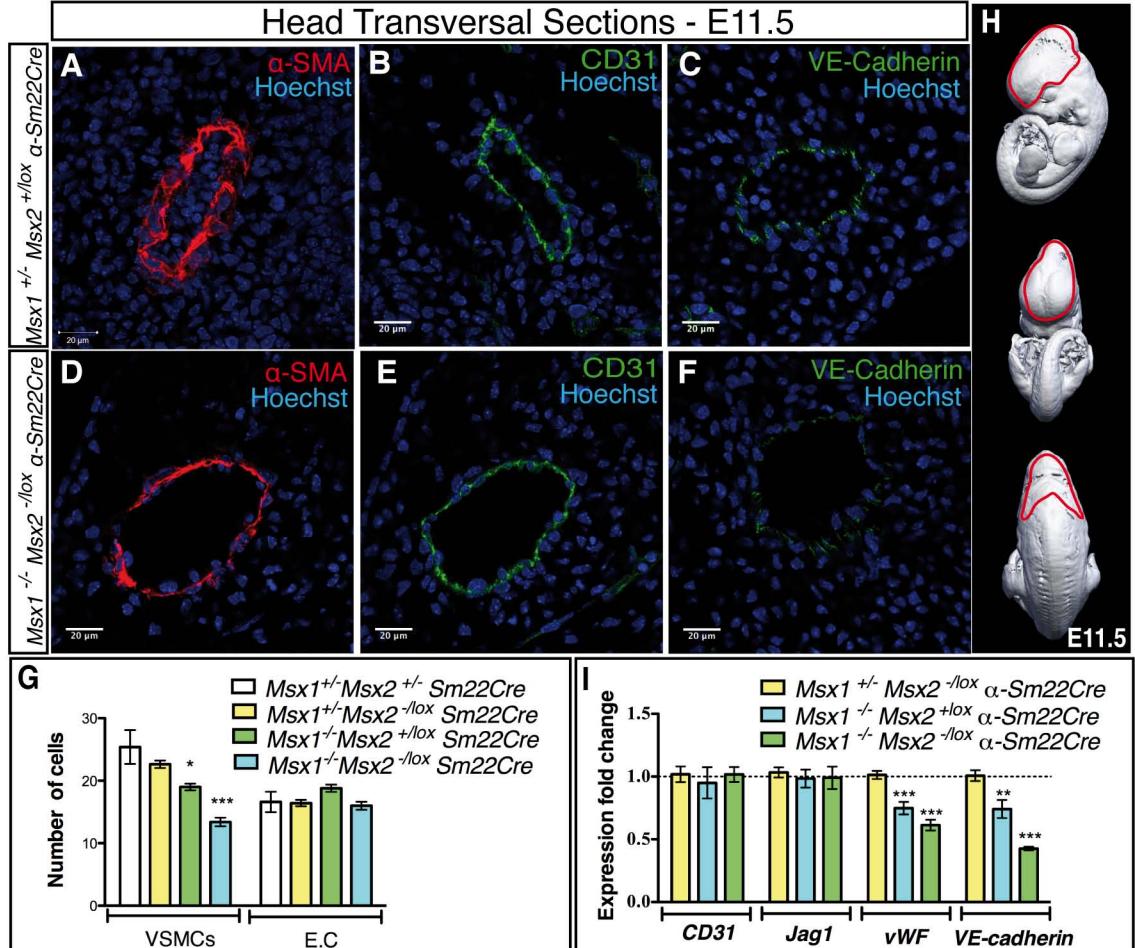


Figure 2

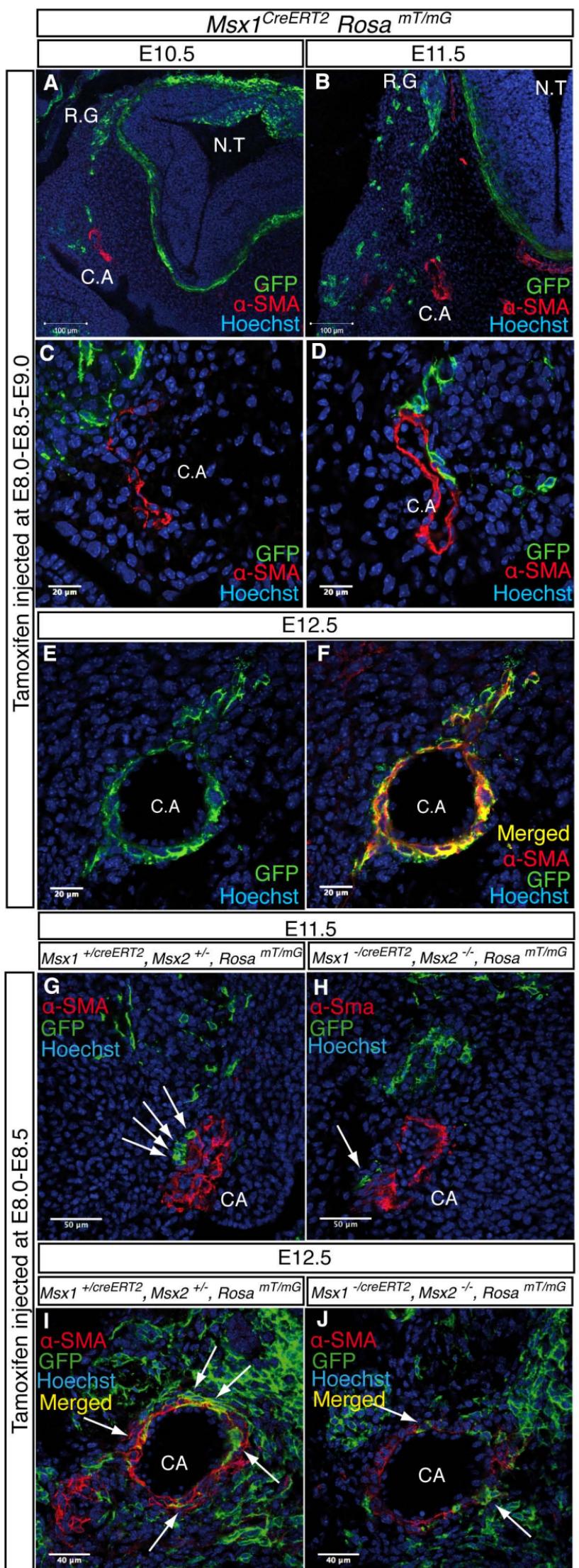


Figure 3

*Msx1*<sup>creERT2/+</sup>, *Msx2*<sup>+/−</sup>, *Rosa*<sup>mT/mG</sup>

*Msx1*<sup>creERT2/−</sup>, *Msx2*<sup>−/−</sup>, *Rosa*<sup>mT/mG</sup>

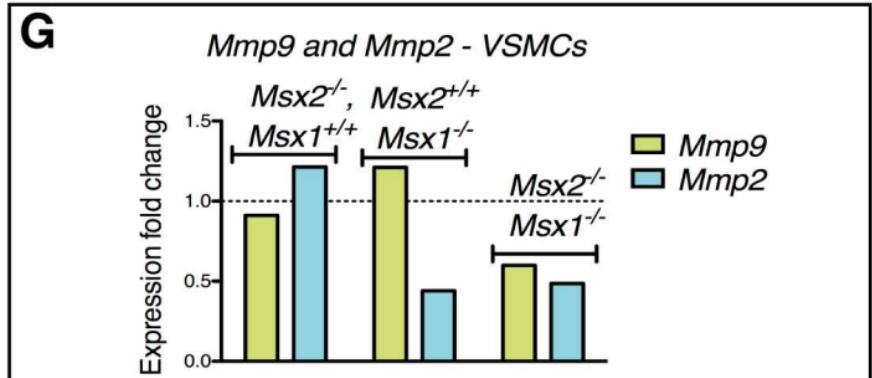
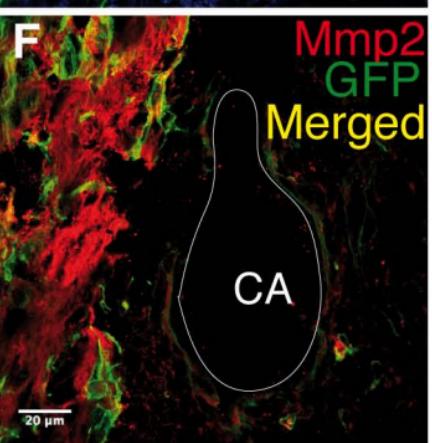
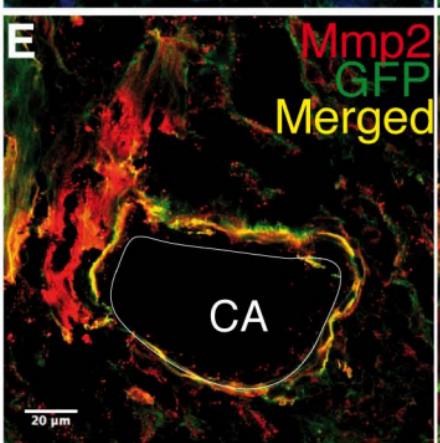
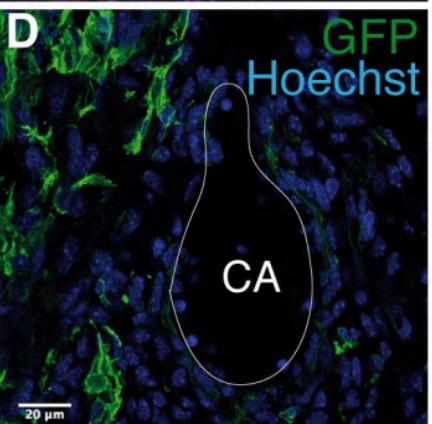
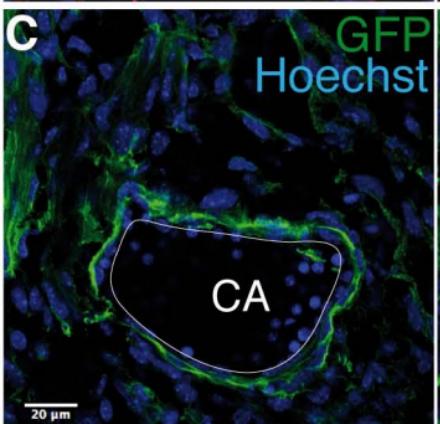
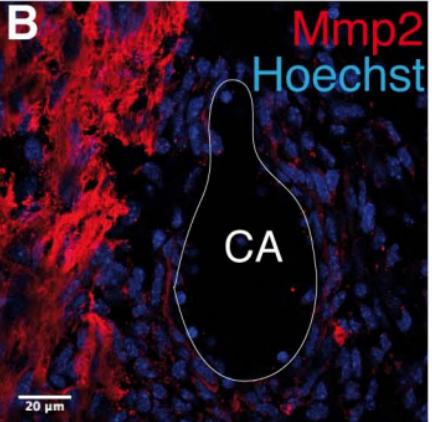
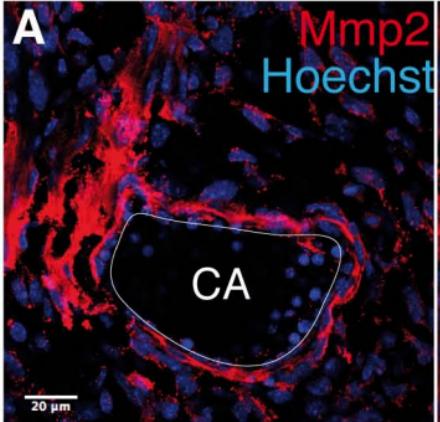
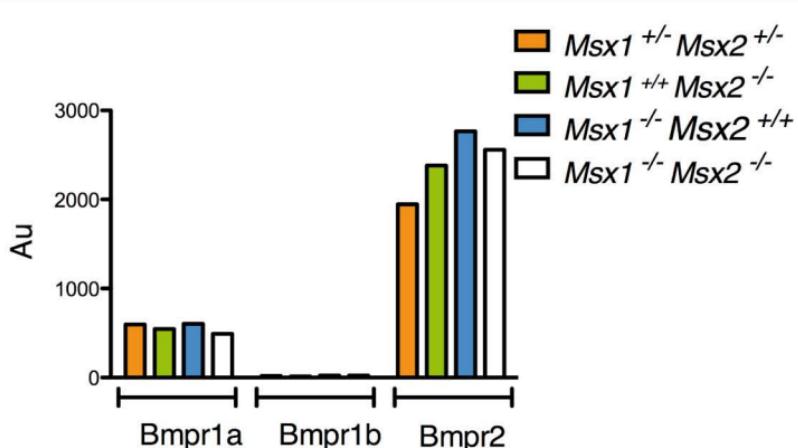
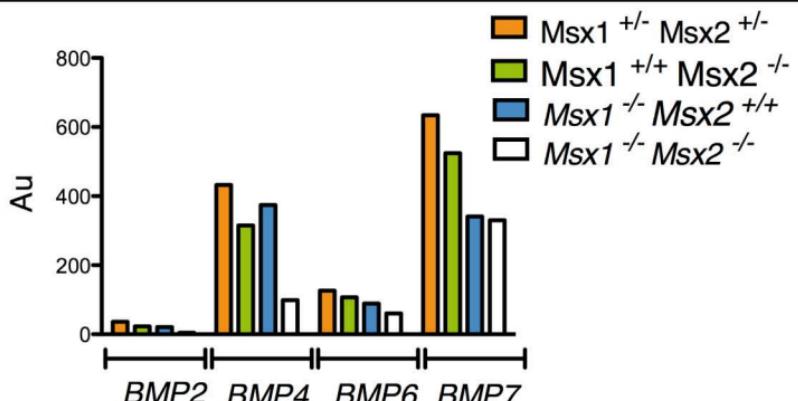
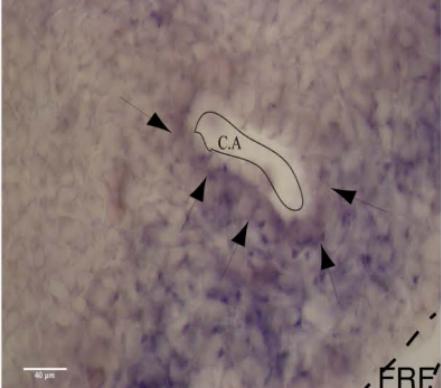


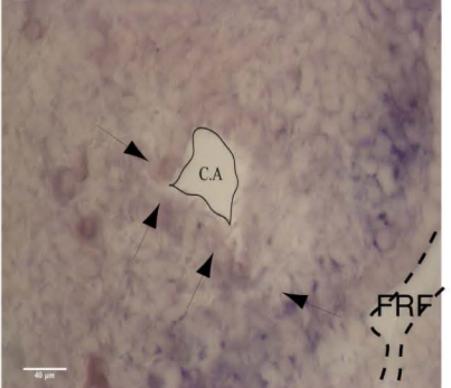
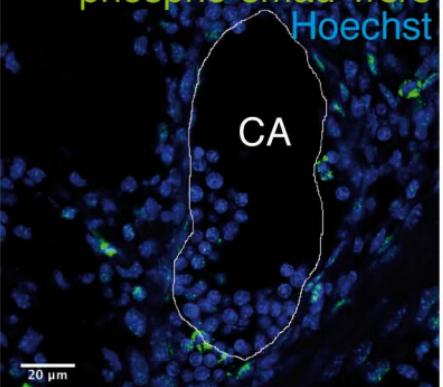
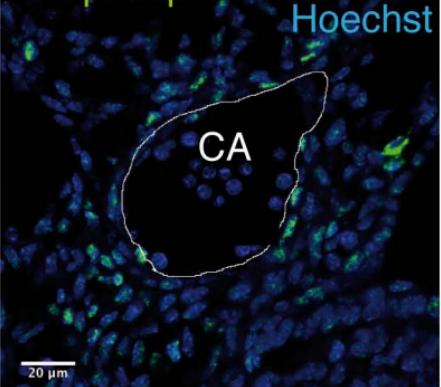
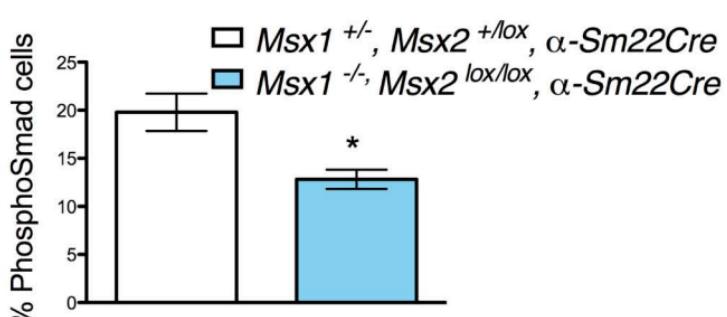
Figure 4

**A** BMP and BMP $\beta$  expression in VSMCs**B** *Msx1<sup>+/-</sup>, Msx2<sup>lox/+</sup>, a-Sm22Cre**Msx1<sup>-/-</sup>, Msx2<sup>lox/-</sup>, a-Sm22Cre***B'**

BMP4

**B''**

BMP4

**C** Carotid Artery E11.5 - Transversal section*Msx1<sup>+/-</sup>, Msx2<sup>lox/+</sup>, a-Sm22Cre**Msx1<sup>-/-</sup>, Msx2<sup>lox/-</sup>, a-Sm22Cre***C'** phospho-smad 1/5/8 Hoechst**C''** phospho-smad 1/5/8 Hoechst**D** phospho-smad 1/5/8 quantification**Figure 5**

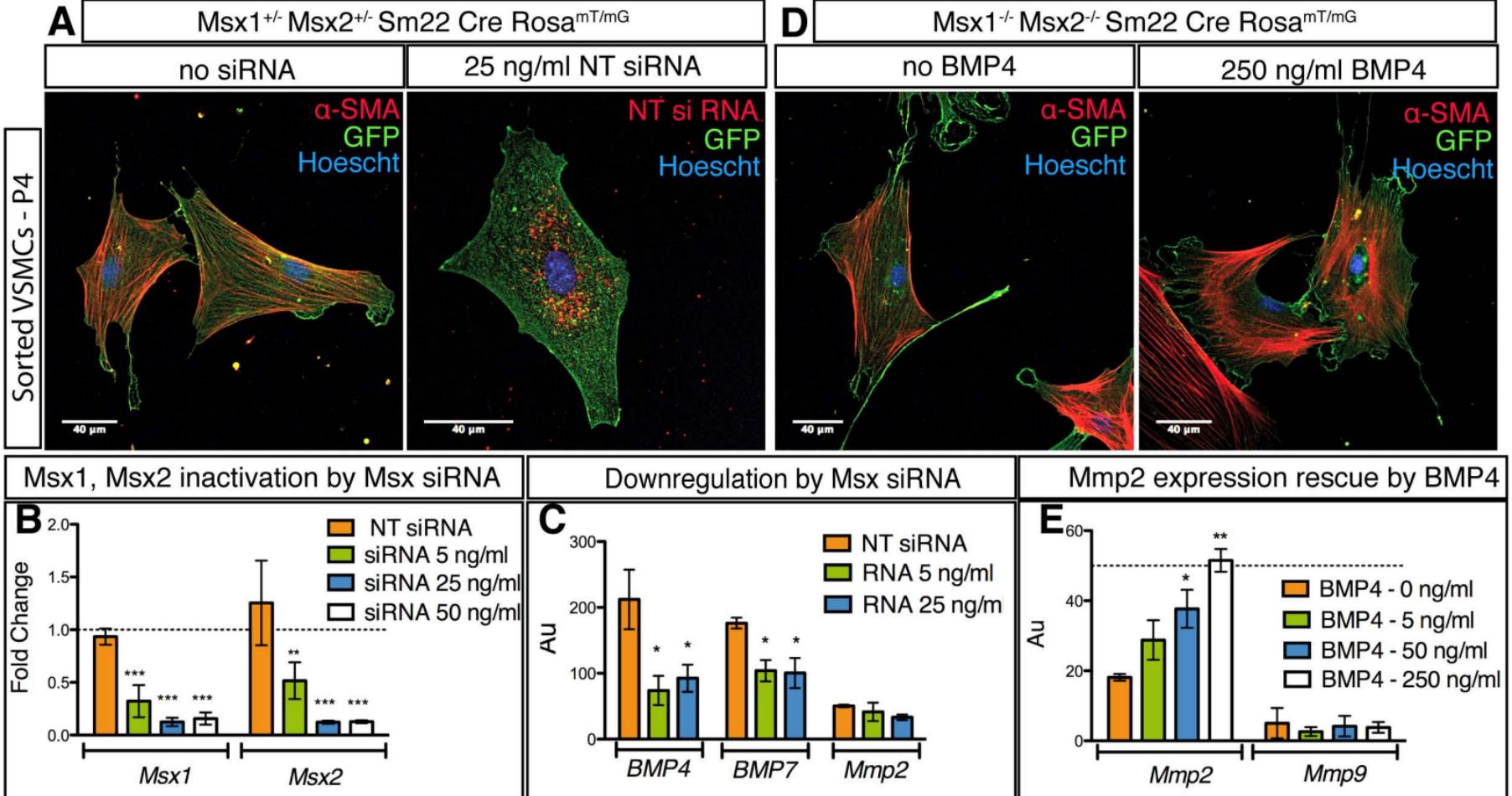


Figure 6

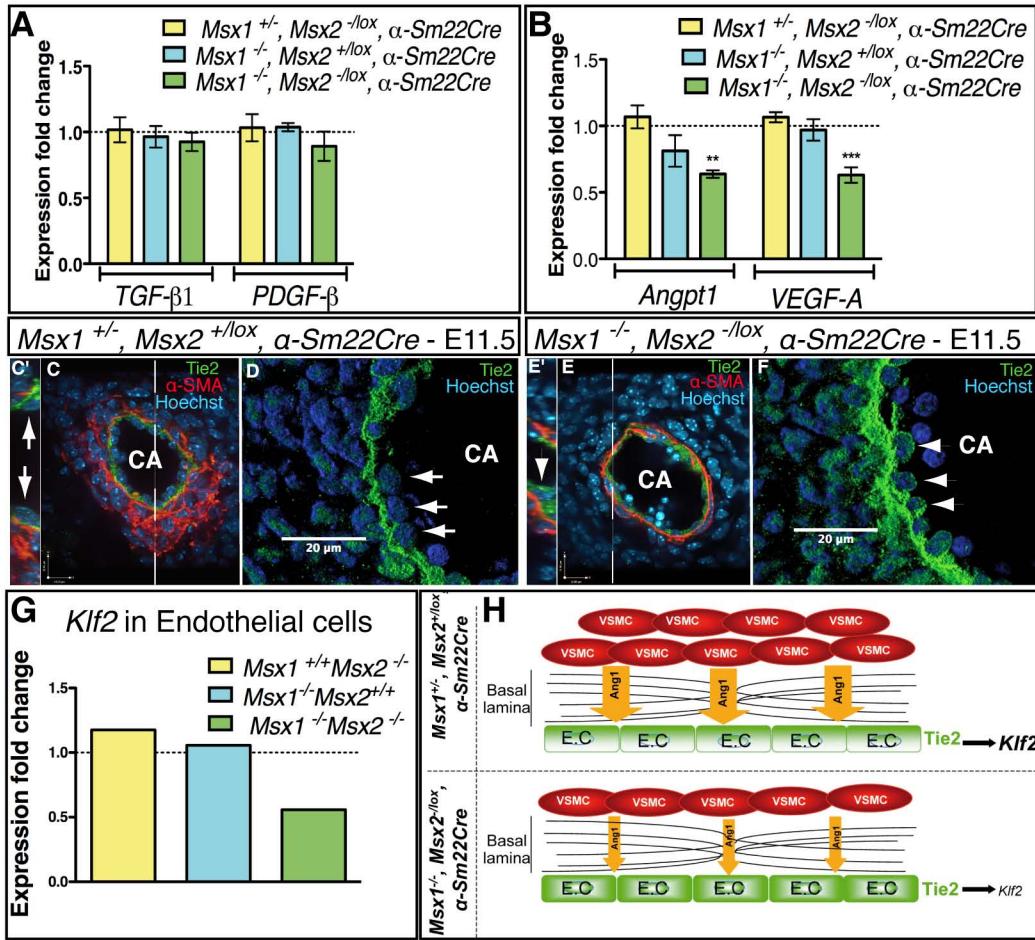


Figure 7

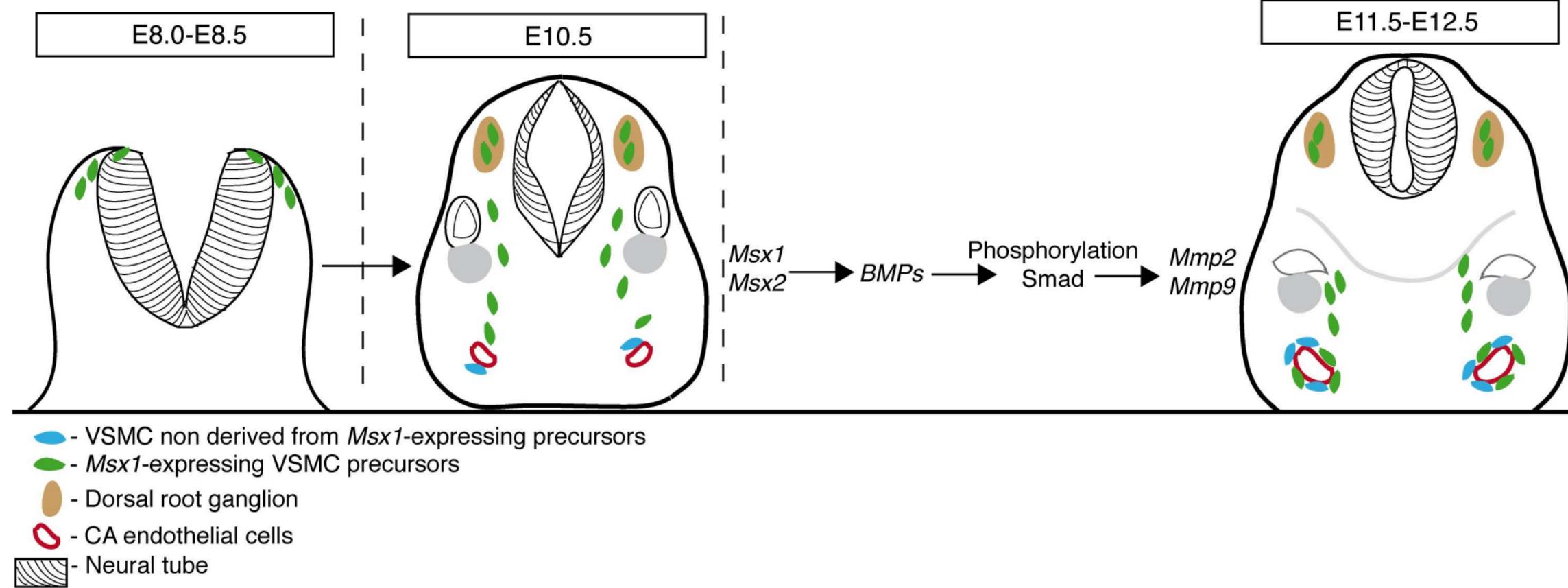


Figure 8