

## Supplementary Figures Legends

### **Fig. S1. Sox9 knockdown inhibits proliferation in human mammary epithelial**

**stem/progenitor cells.** (A), Sox9 protein expression in human mammary epithelial stem/progenitor (MaSCs) and myoepithelial progenitor cells (MPCs) using western blotting with anti-Sox9 antibody. (B), MaSCs expressing scrambled (control) or Sox9 shRNA using western blotting with anti-Sox9 antibody. (C), Proliferation curves of MaSCs control or upon Sox9 shRNA knockdown. Experiment was carried out three times. A representative figure from one experiment with Mean+ SD of three replicates is shown.

### **Fig. S2. Sox9 deletion in Sox9<sup>fl/fl</sup> mammary epithelial cells inhibits proliferation.**

(A), mammary fibroblasts or mammary epithelial cells from Sox9<sup>fl/fl</sup> mice were infected with adenovirus GFP (control) or Cre-GFP (Sox9 KO). Sox9 protein expression was analyzed by western blotting using anti-Sox9 antibody. (B), Proliferation over days was assessed in Sox9<sup>fl/fl</sup> mammary epithelial cells infected with adenovirus Cre (red) and GFP (blue).

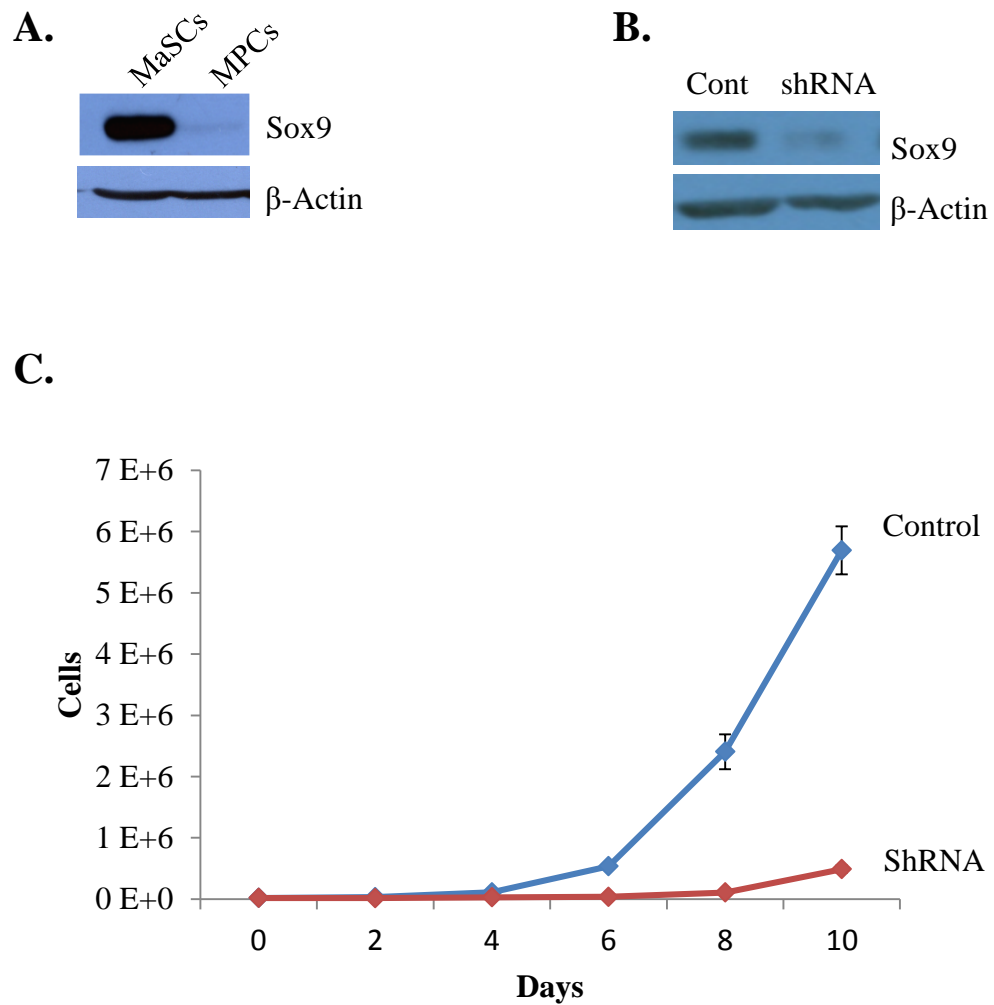
### **Fig. S3. Western blotting and immunostaining with several anti-Sox9 antibodies.**

(A), Lysates from human mammary stem/progenitor (stem) and myoepithelial (myo) cells (known to be negative for Sox9 mRNA expression) were examined for Sox9 protein by western blotting. Please note, several non-specific bands were observed in all antibodies tested with the exception of one antibody (ab71762) which did not show any immunoreactivity in western blotting.

Antibodies tested include Millipore Cat: AB5535; LSBio Cat: LS-B5761/29528; Abnova, Cat: PAB12736; AbCam Cat: ab3697, ab71762, Ab59252. (B), Formalin fixed paraffin embedded mammary gland cut sections were prepared from MMTV-Cre; Sox9<sup>fl/fl</sup>; CAG-eGFP mice and

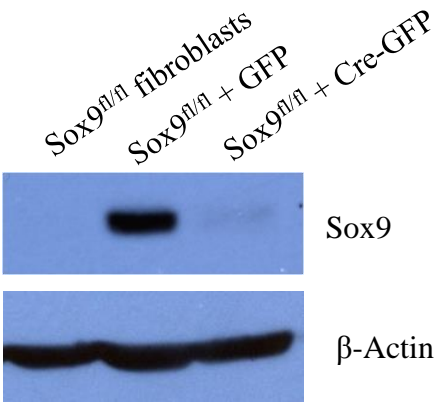
were co-stained with  $\alpha$ -GFP (green) and  $\alpha$ -Sox9 (red) antibodies (Millipore). Myoepithelial cells, which are clearly deleted for Sox9 (as demonstrated by their GFP expression), are also staining positive for Sox9, which is consistent with the non-specific immunoreactivity seen in western blotting. DAPI (blue) was used for nuclear counterstaining.

**Fig. S1.**

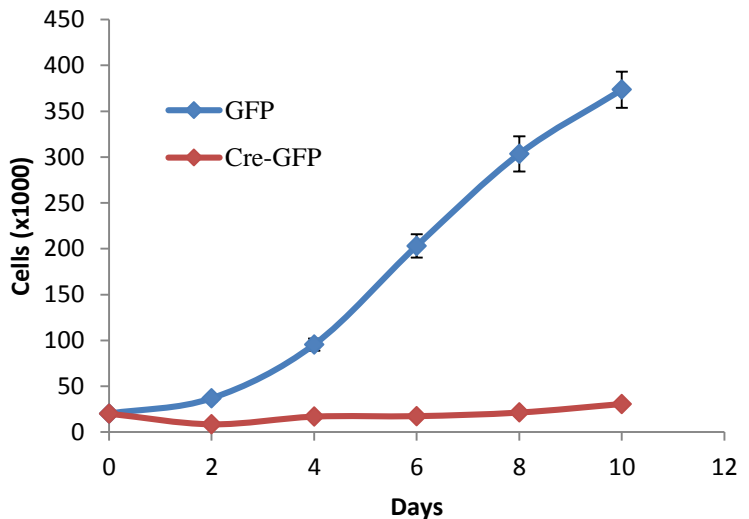


**Fig. S2.**

**A.**

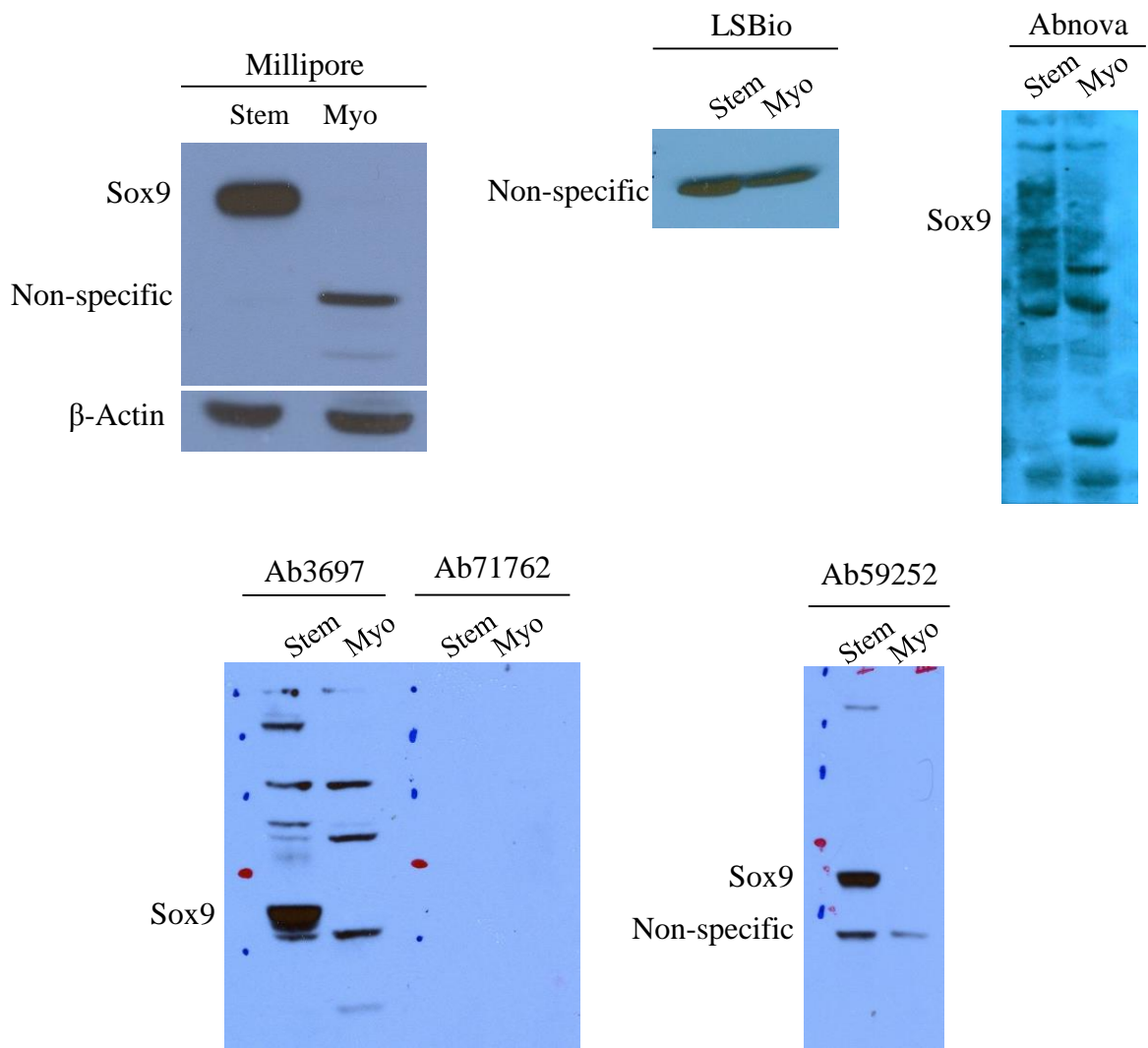


**B.**



**Fig. S3.**

**A.**



**B.**

