MolecularMedicine

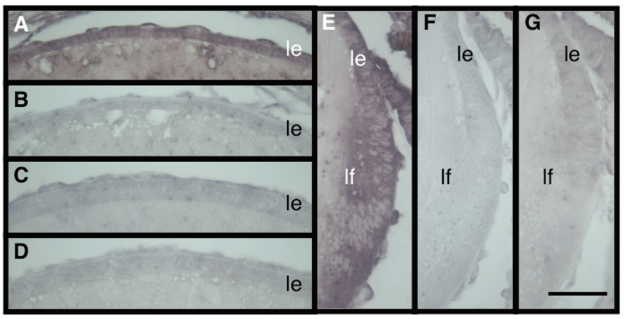
Supplemental Data

Sprouty Is a Negative Regulator of Transforming Growth Factor β–Induced Epithelial-to-Mesenchymal Transition and Cataract

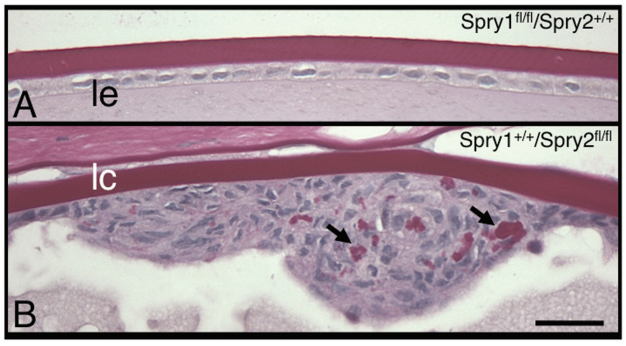
Eun Hye H Shin,[1] M Albert Basson,[2] Michael L Robinson,[3] John W McAvoy,[1] and Frank J Lovicu[1]

Online address: http://www.molmed.org

The Feinstein Institute for Medical Research North Shore LIJ



Supplementary Figure S1. Expression of Spry1 and Spry2 transcripts in the neonatal mouse lens. Representative micrographs of in situ hybridization labeling for Spry1 mRNA (A-D) or Spry2 mRNA (E-G) using antisense (A,C,E,G) or sense (B,D,F) digoxygenin-labelled riboprobes, on wild-type (WT) lenses (A,B,E,F) or transgenic lenses deficient for Spry1 and Spry2 ($Spry1^{fl/fl}/Spry2^{fl/fl}$) (C, D,G, using *Le-Cre*). Abbreviations: le, lens epithelium; lf, lens fibers. Scale bar; 50μm.



Supplementary Figure S2. Histological differences between Spry1- and Spry2-deficient murine lenses. Representative histological sections of postnatal-d-80 mouse lenses deficient for either all alleles of Spry1 ($Spry^{fl/fl}/Spry2^{+/+}$, A) or all alleles of Spry2 ($Spry^{+/+}/Spry2^{fl/fl}$, B) using *MLR10-Cre*, stained with Periodic-Acid Schiff reagent. In Spry1-deficient lenses (A), the normal anterior monolayer of central lens epithelial cells (le) is maintained, whereas in Spry2-deficient lenses (B), it becomes multilayered with the more posterior cells acquiring a spindle-shaped morphology as they deposit PAS-reactive ECM (arrows) to form an anterior subcapsular plaque. Scale bar; 30μm.