

Figure 1.1

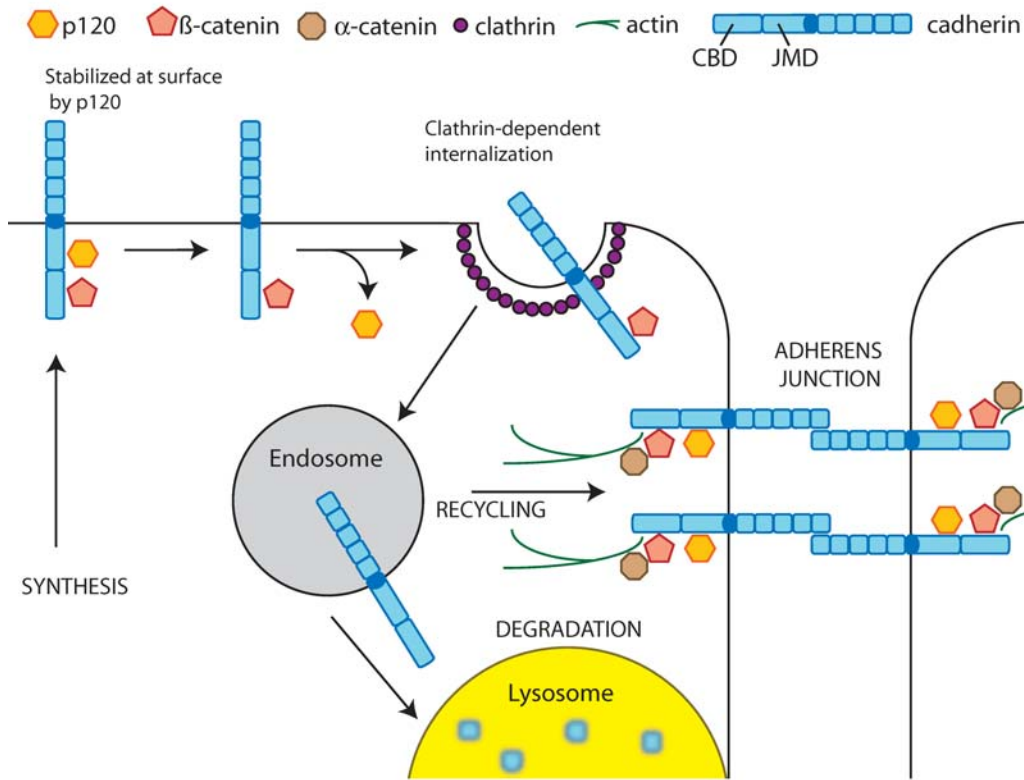
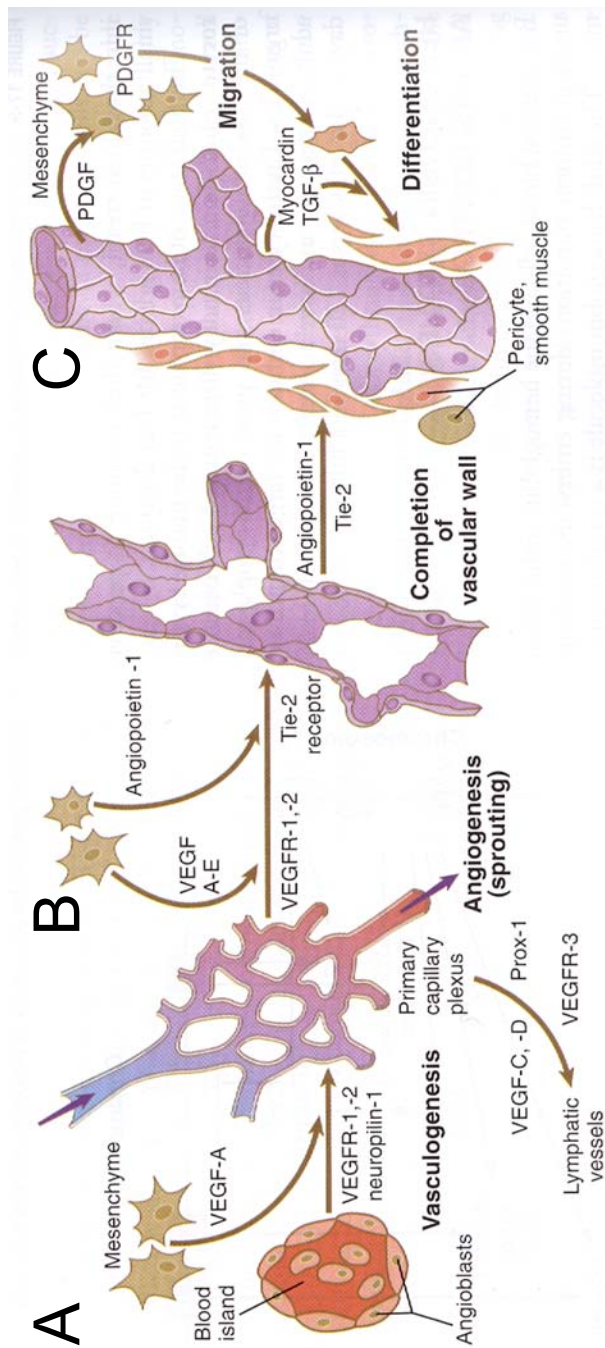
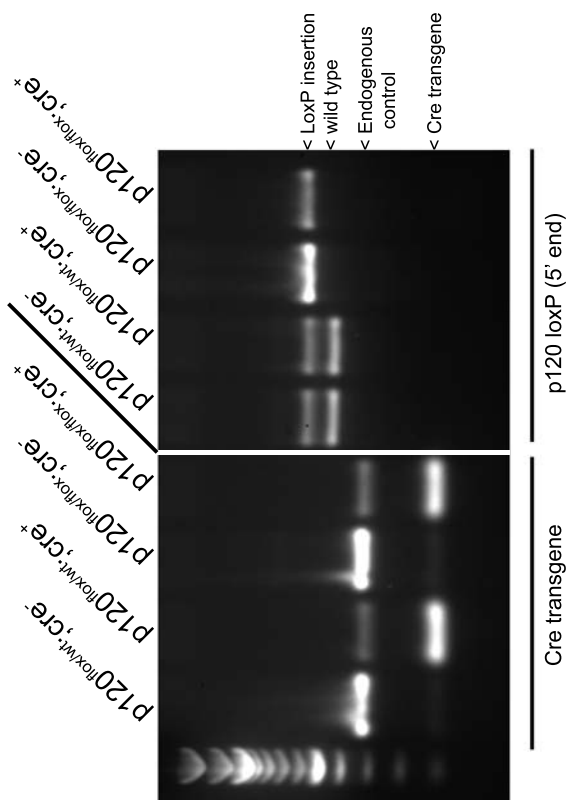
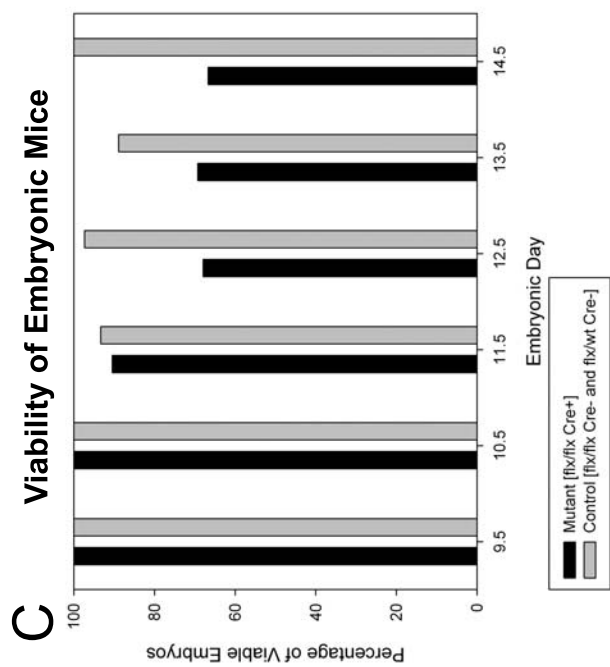


Figure 1.2



(From Carlson, B.M. *Human Embryology and Developmental Biology* (4th ed.), p. 442, Elsevier, 2009)

Figure 1.3



**B** Viability of Neonatal Mice

Genotype	Number	% Actual	% Expected
p120 <sup>flx/wt</sup> ;cre <sup>-</sup>	95	35.2	25.0
p120 <sup>flx/wt</sup> ;cre <sup>+</sup>	55	20.4	25.0
p120 <sup>flx/flx</sup> ;cre <sup>-</sup>	76	28.1	25.0
p120 <sup>flx/flx</sup> ;cre <sup>+</sup>	44	16.3	25.0

**Figure 2.1**

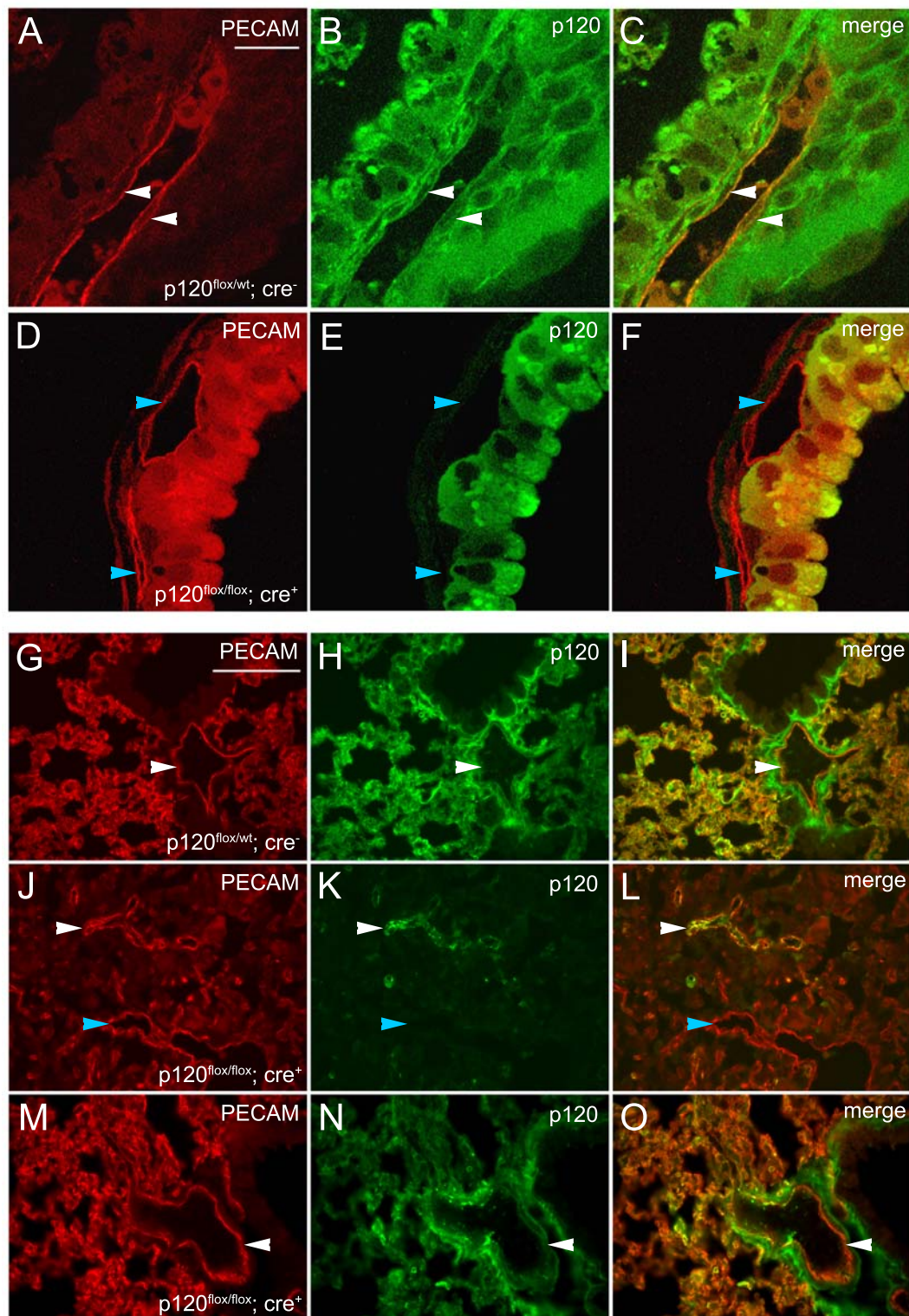


Figure 2.2

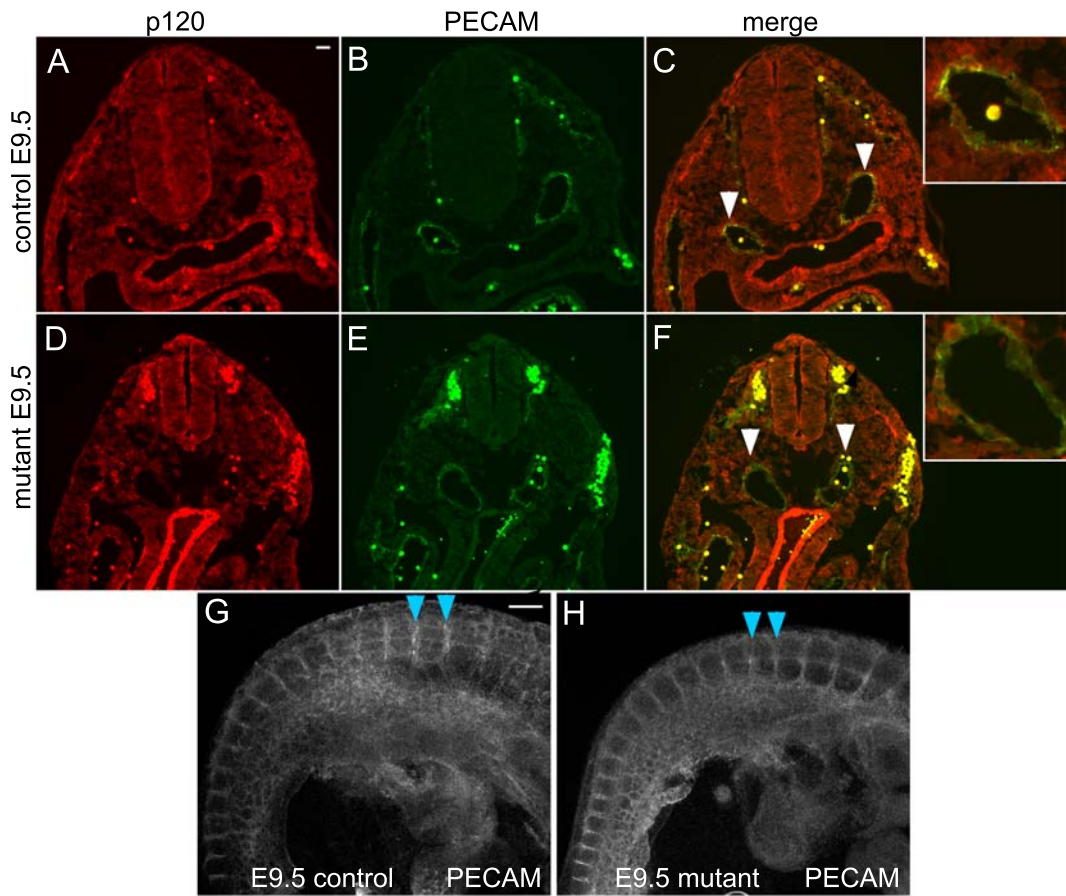


Figure 2.3

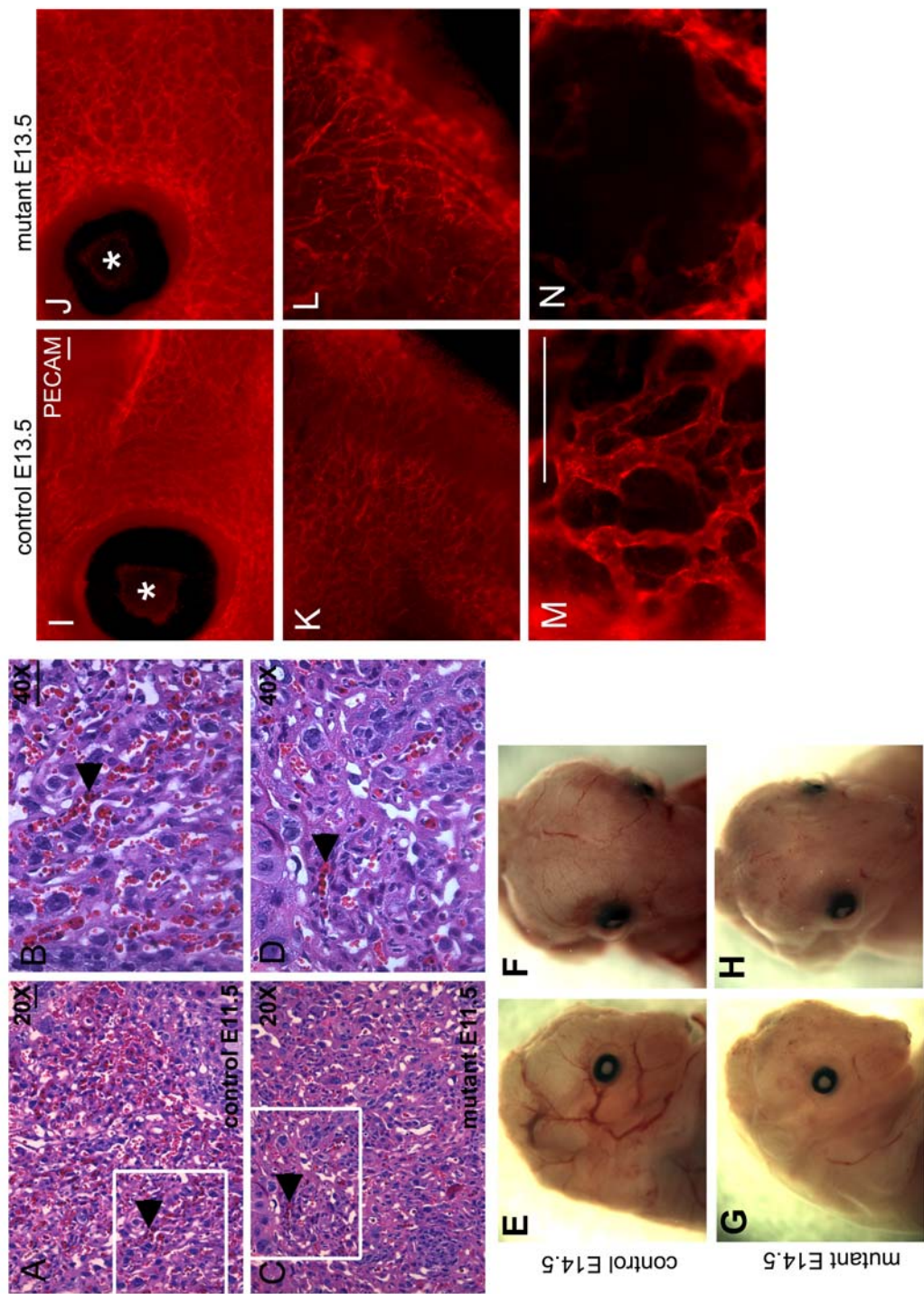


Figure 2.4

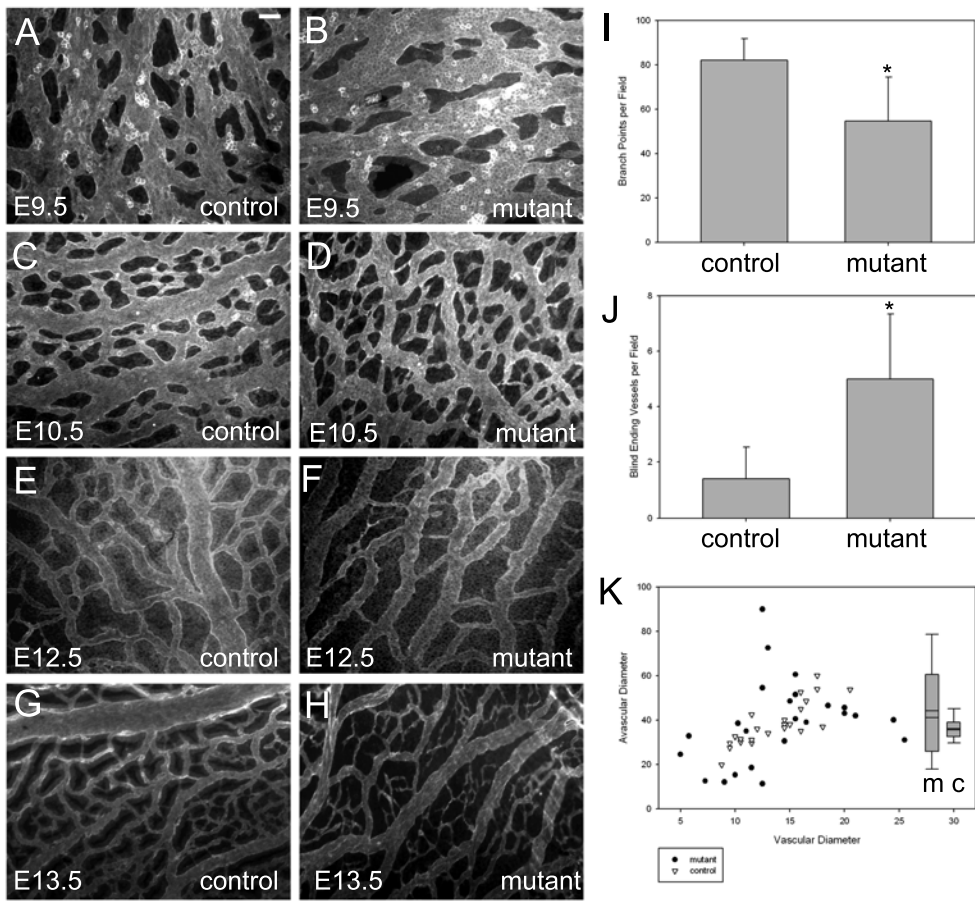


Figure 2.5



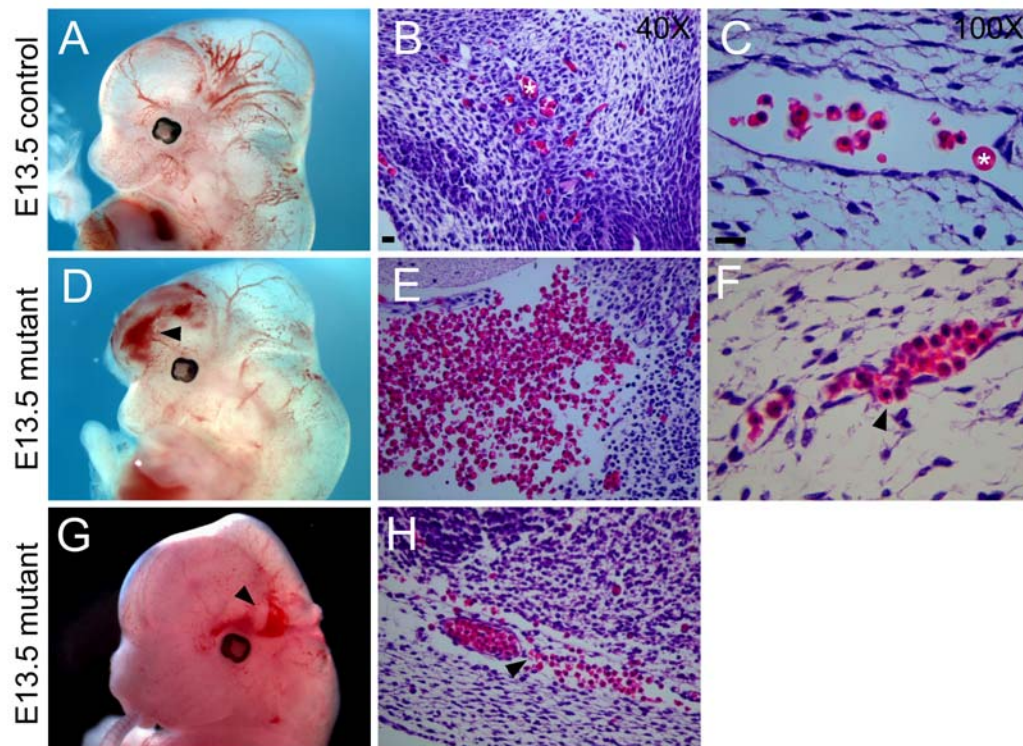


Figure 2.6

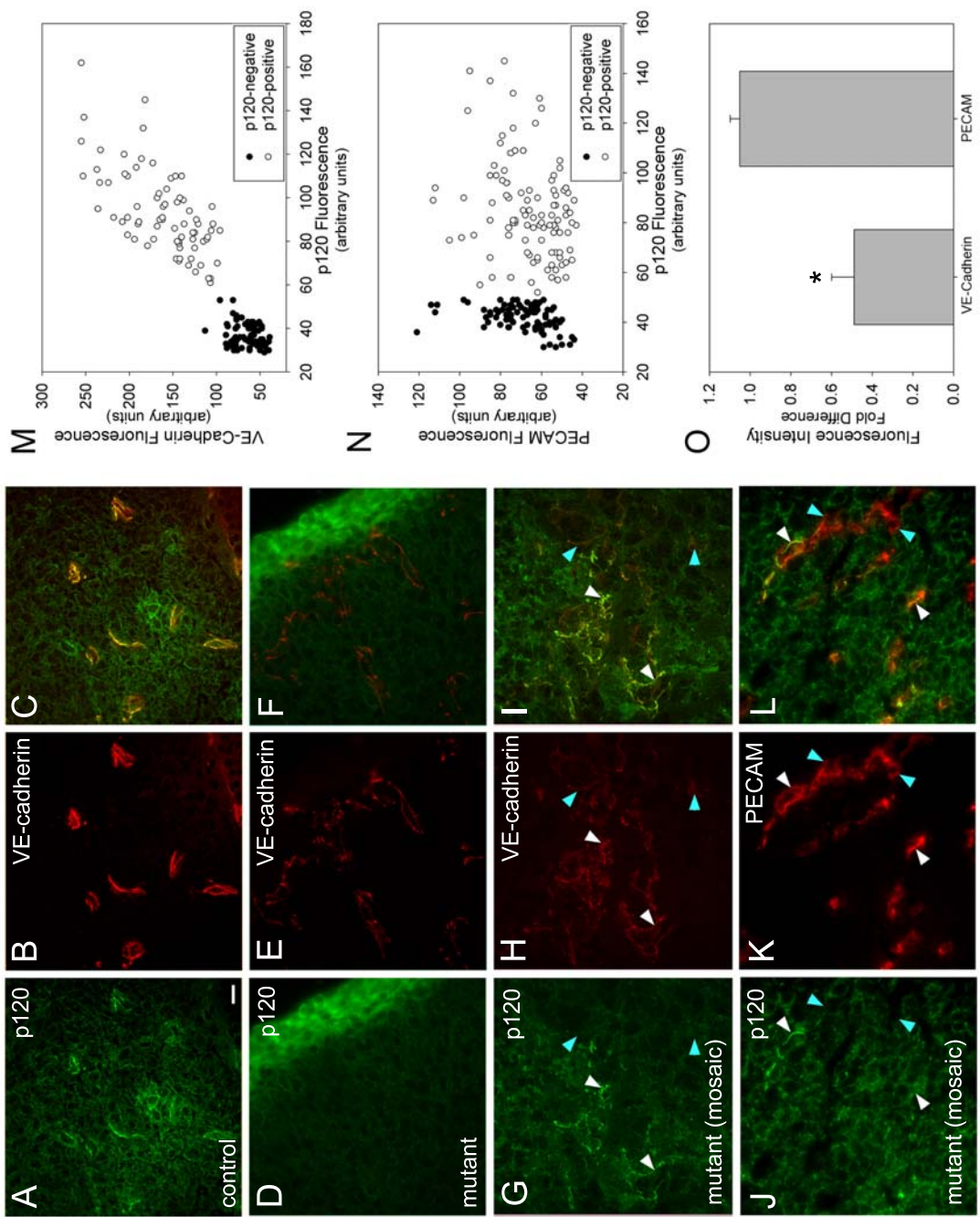


Figure 2.7

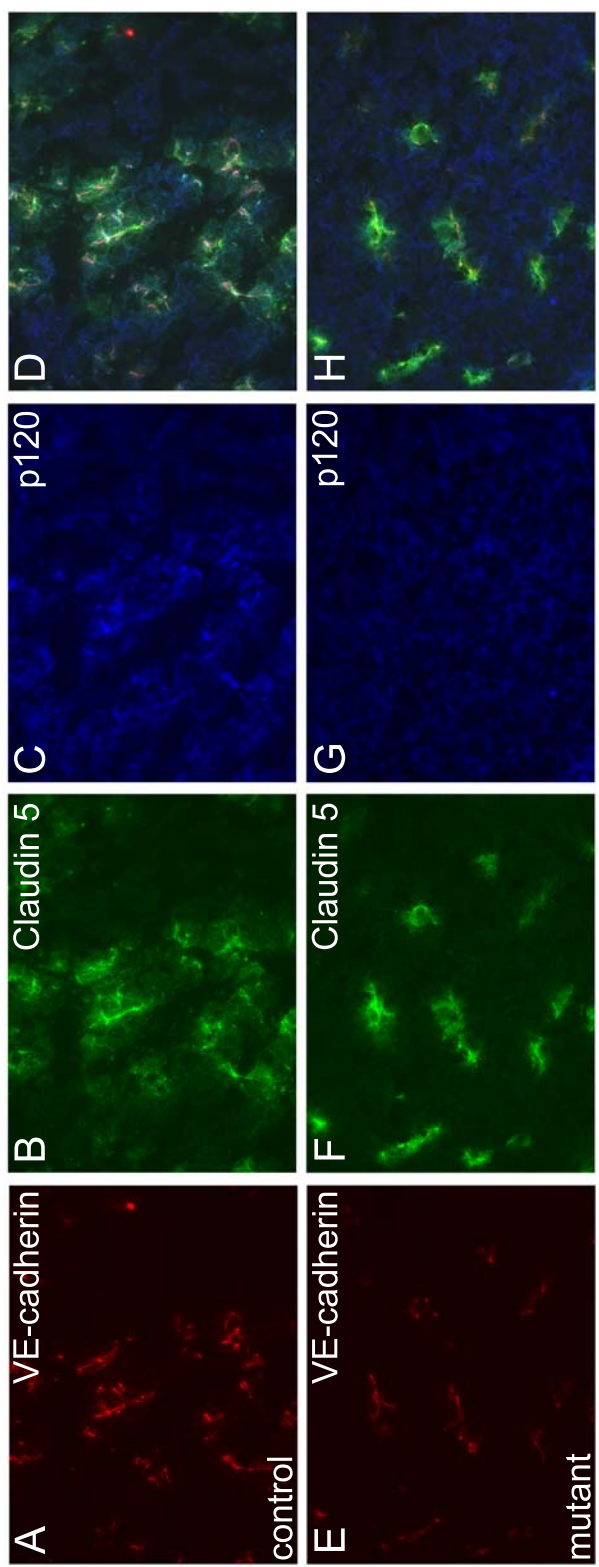


Figure 2.8

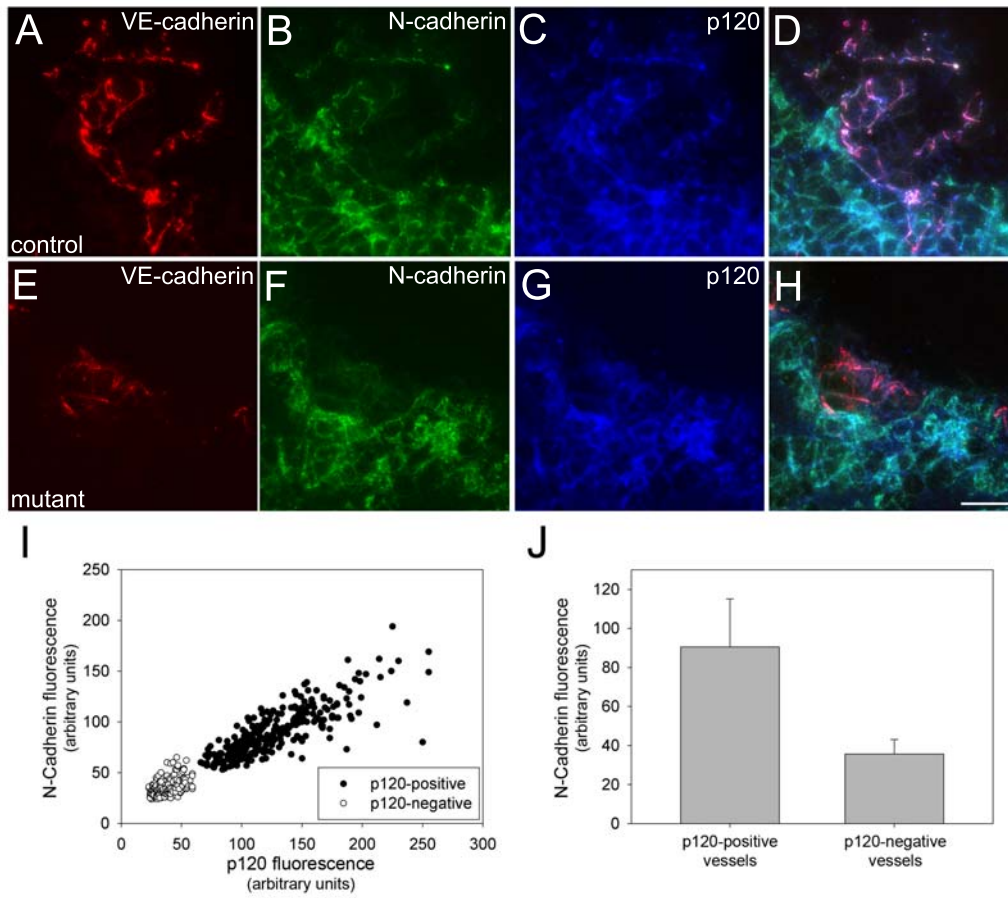


Figure 2.9

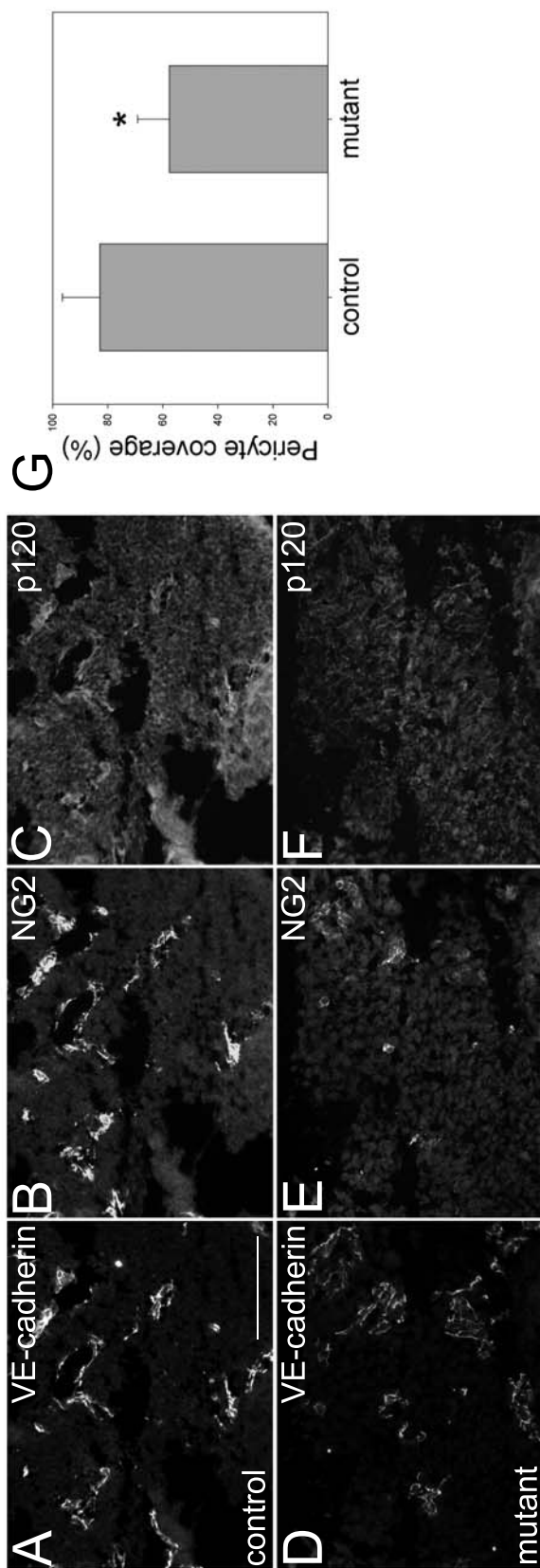


Figure 2.10

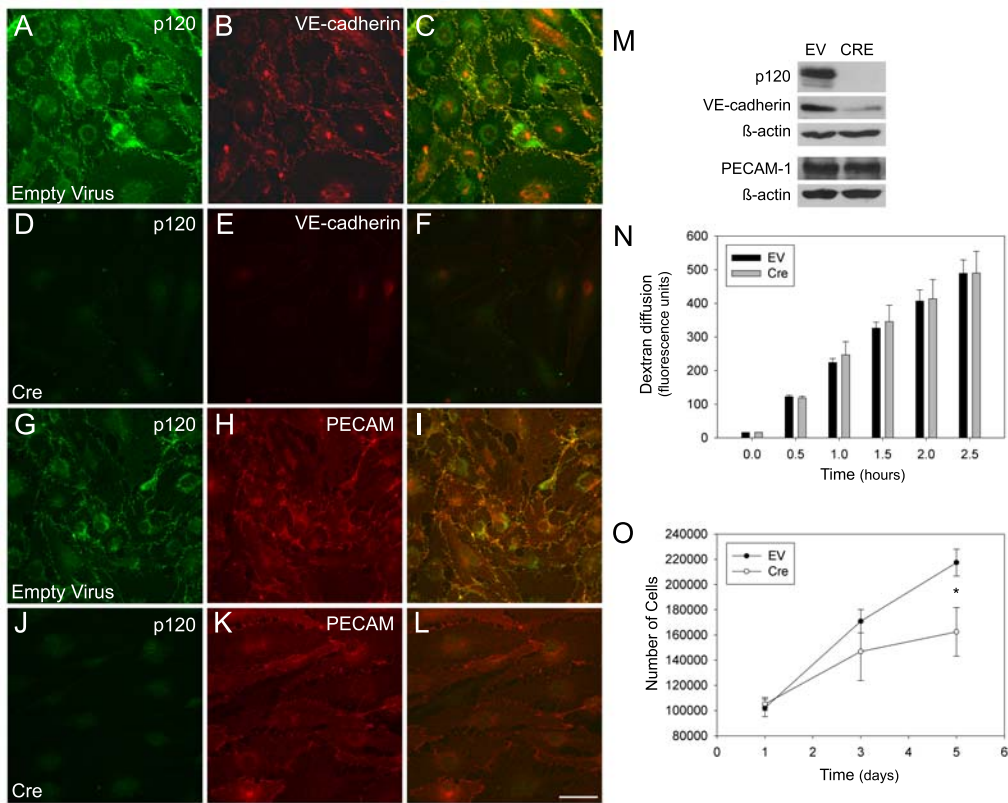


Figure 2.11

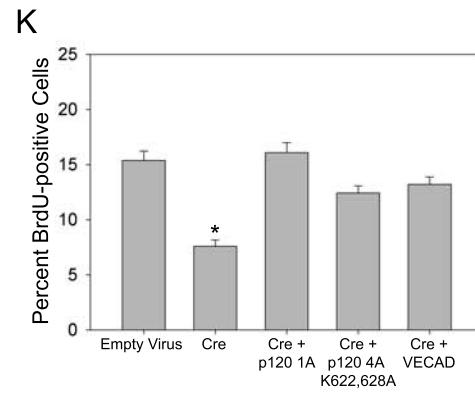
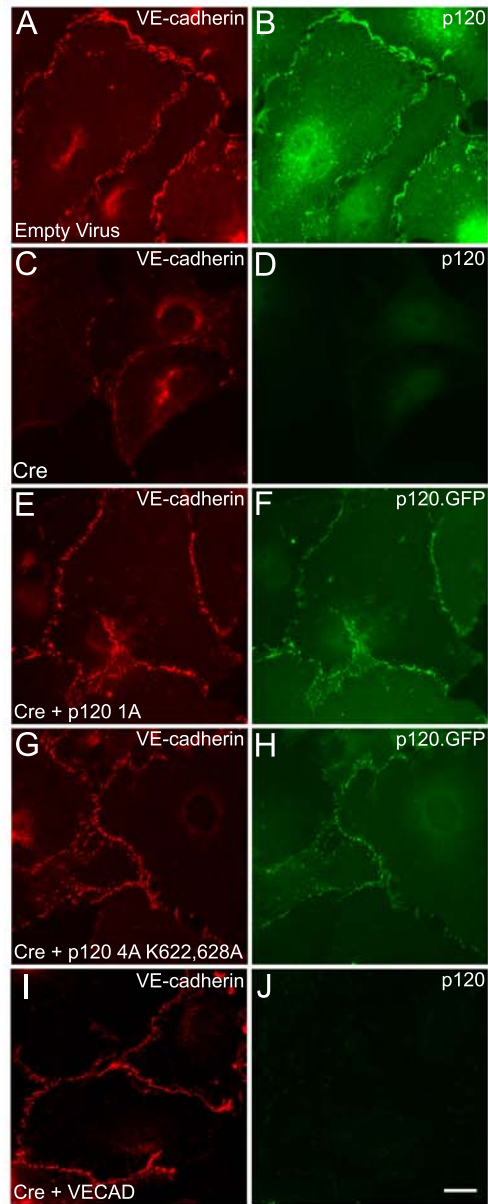


Figure 2.12

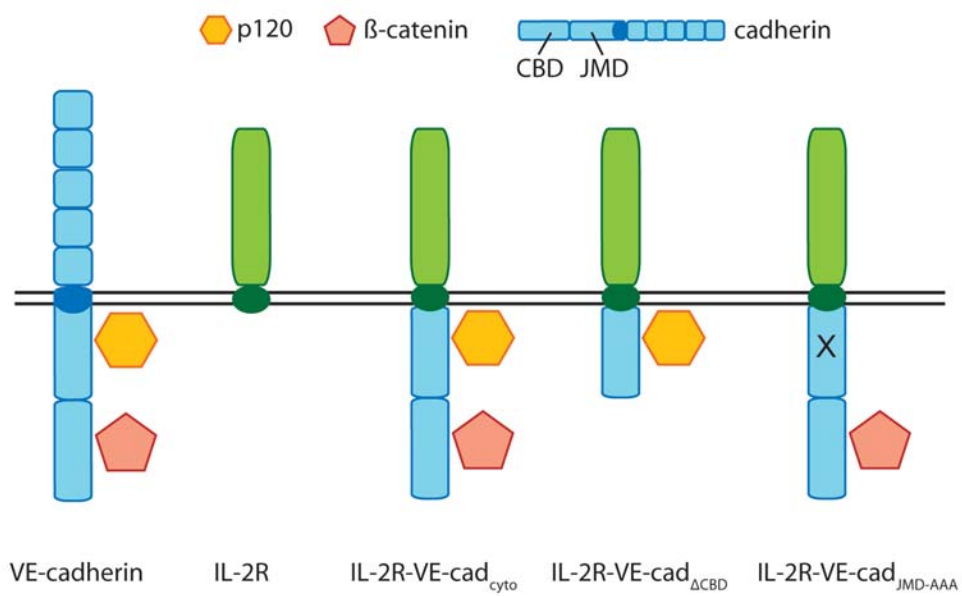


Figure 3.1



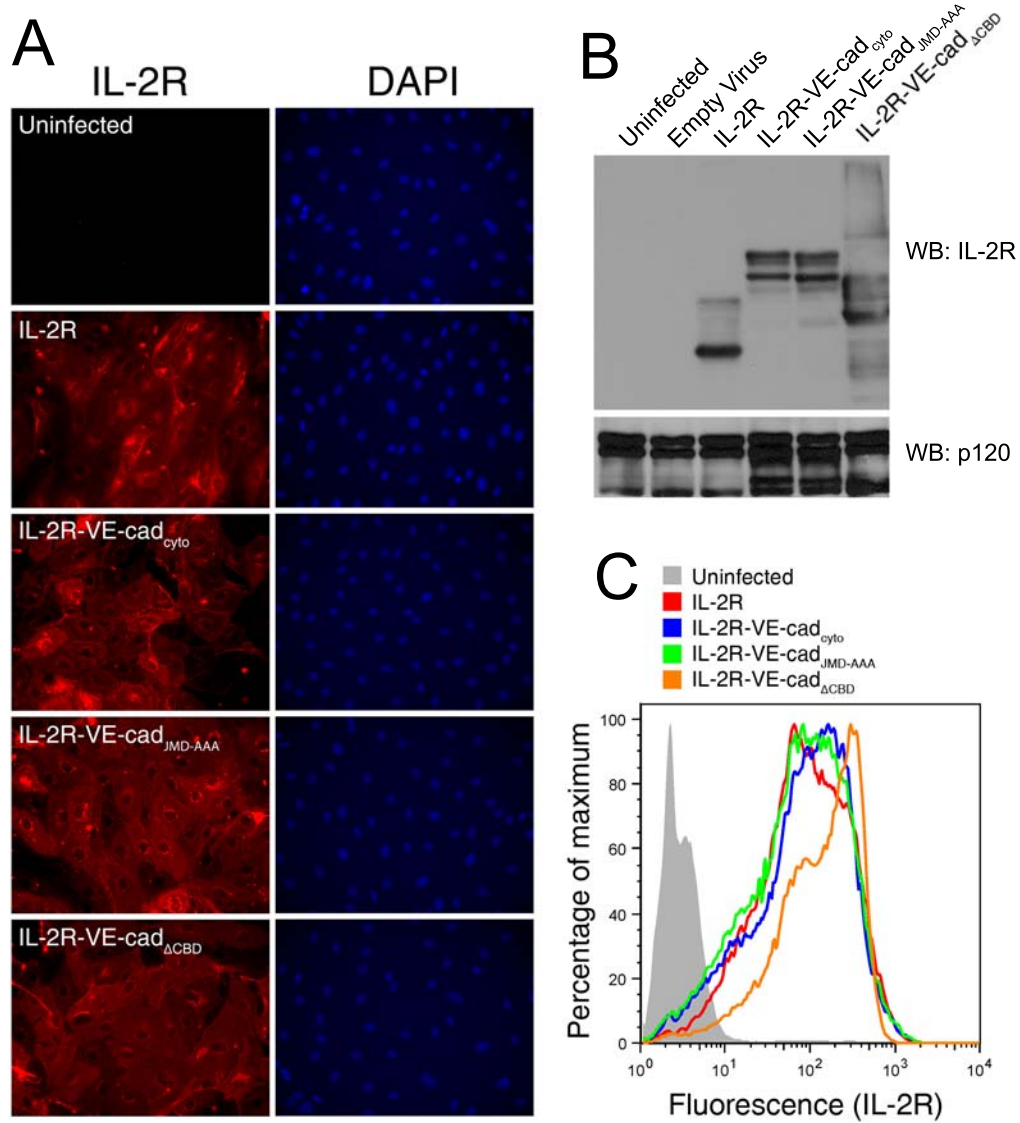


Figure 3.2

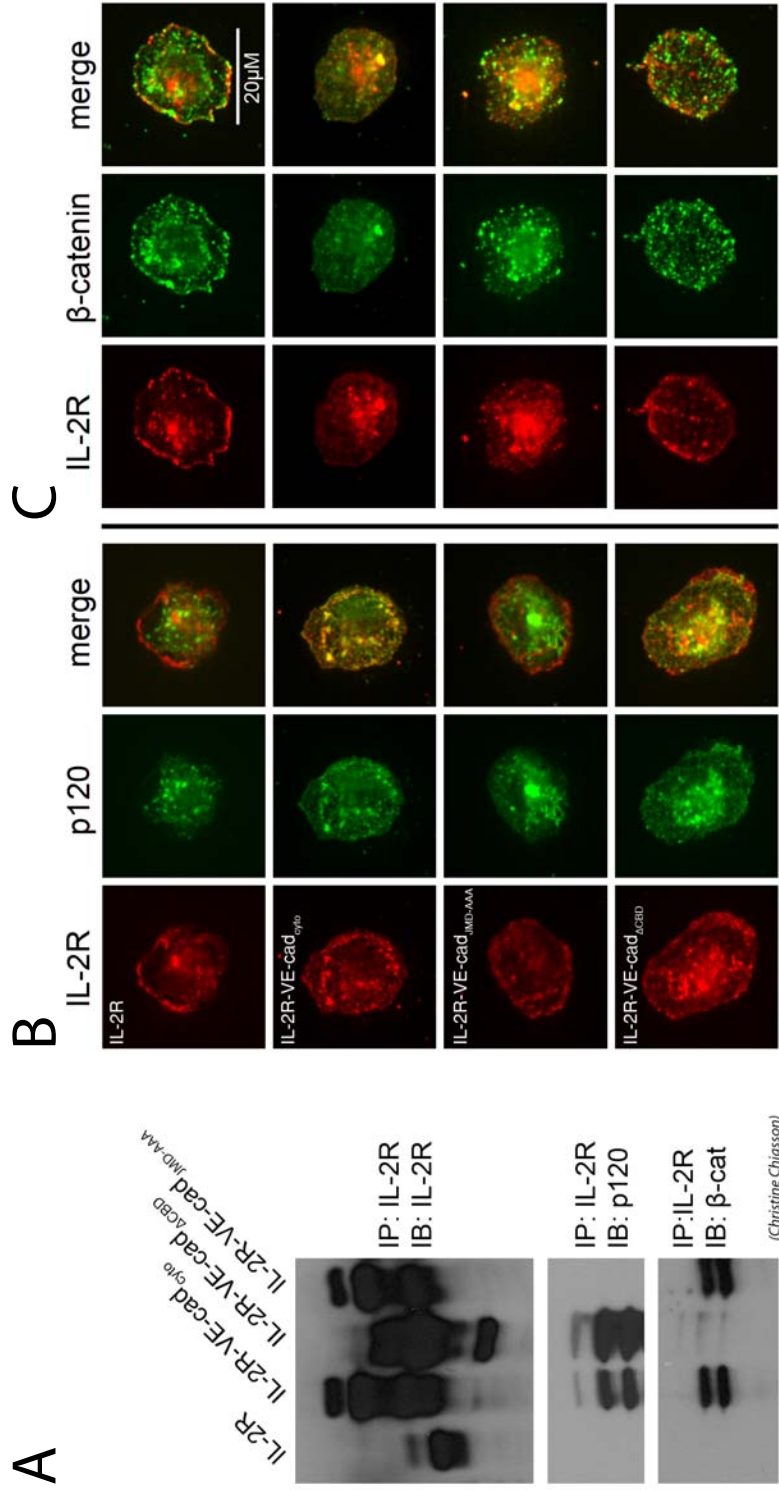


Figure 3.3

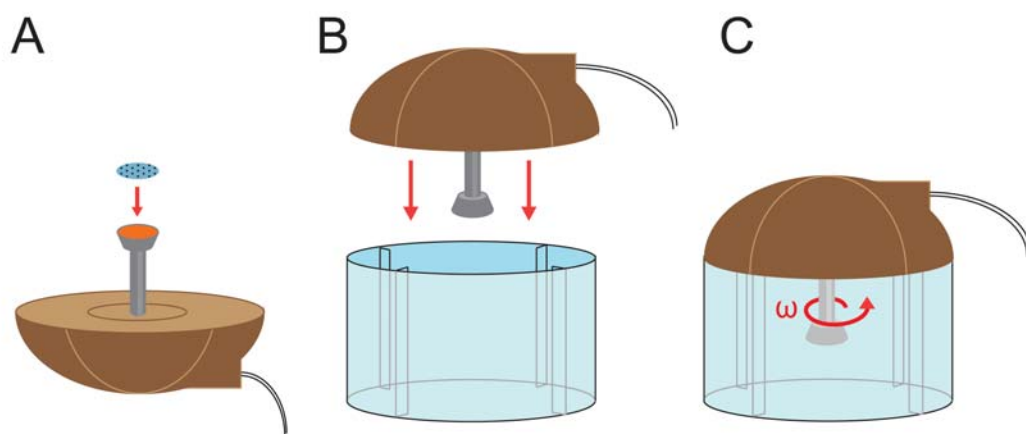


Figure 3.4

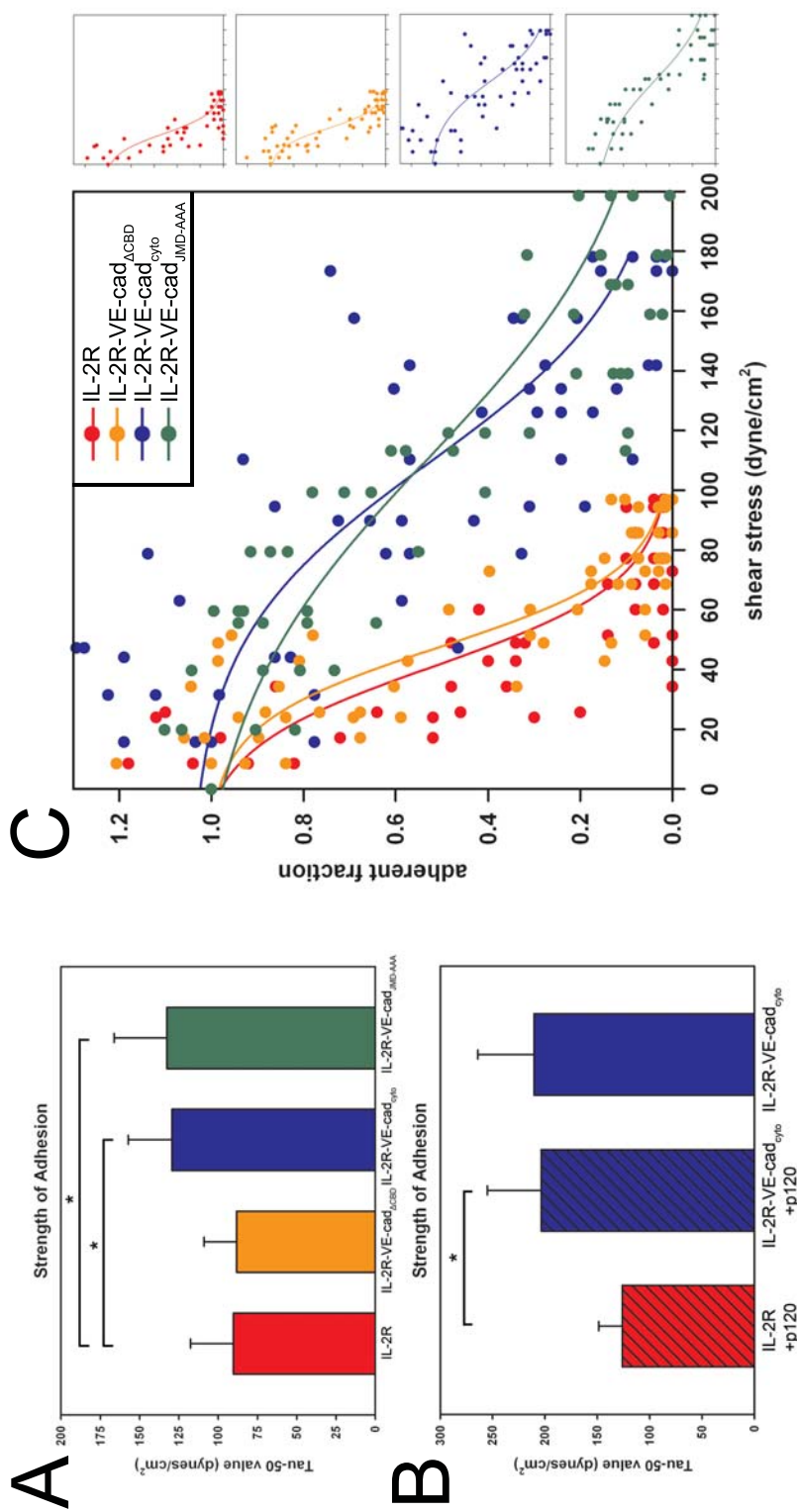


Figure 3.5

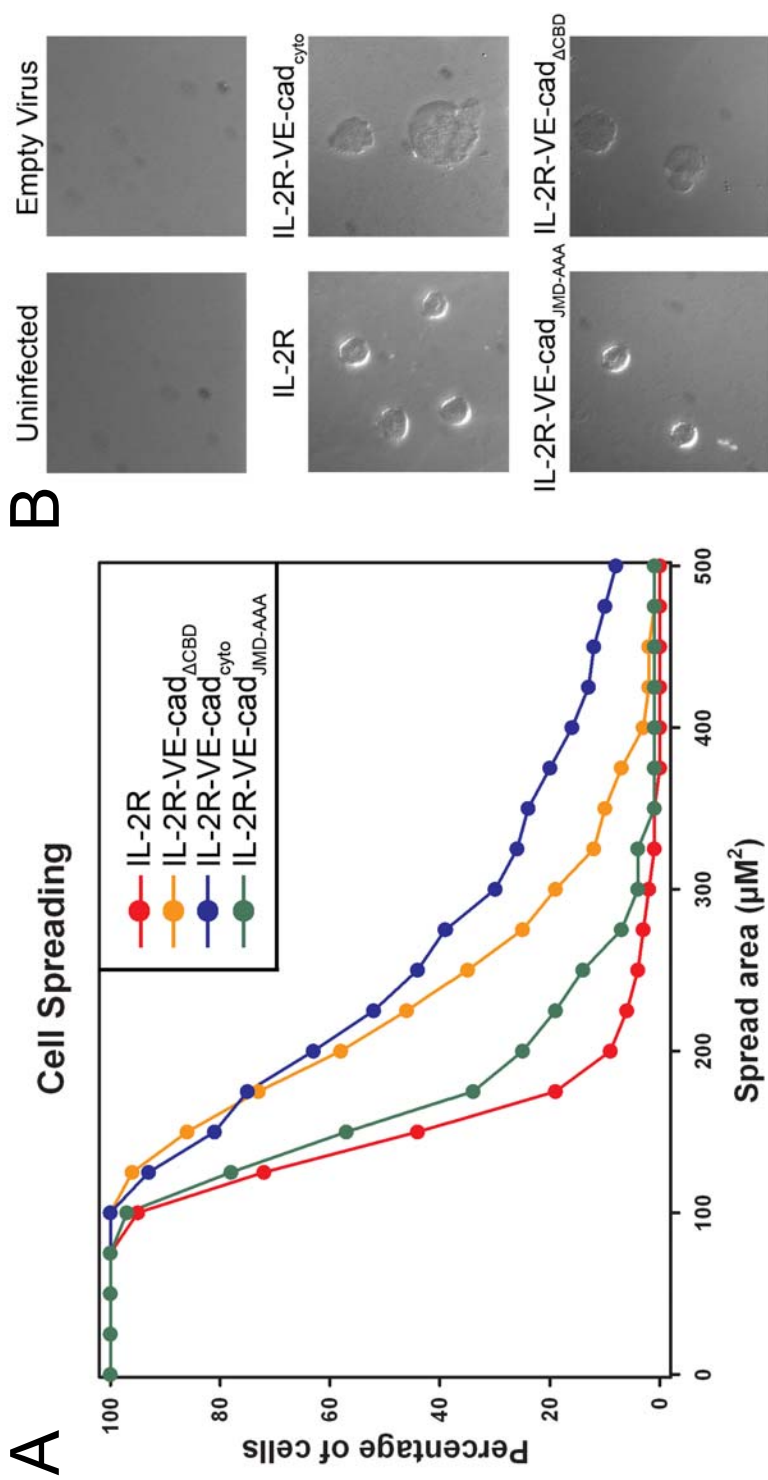


Figure 3.6

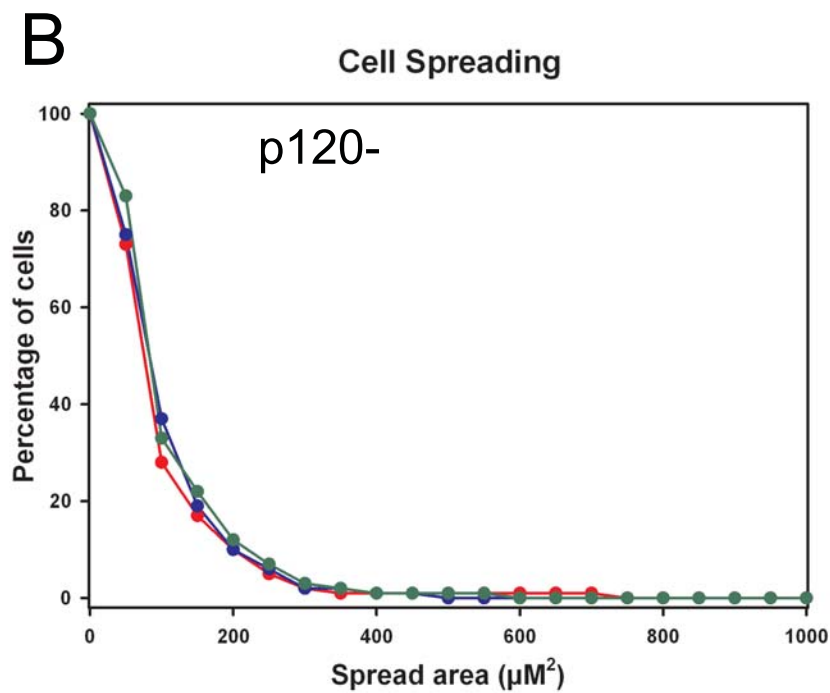
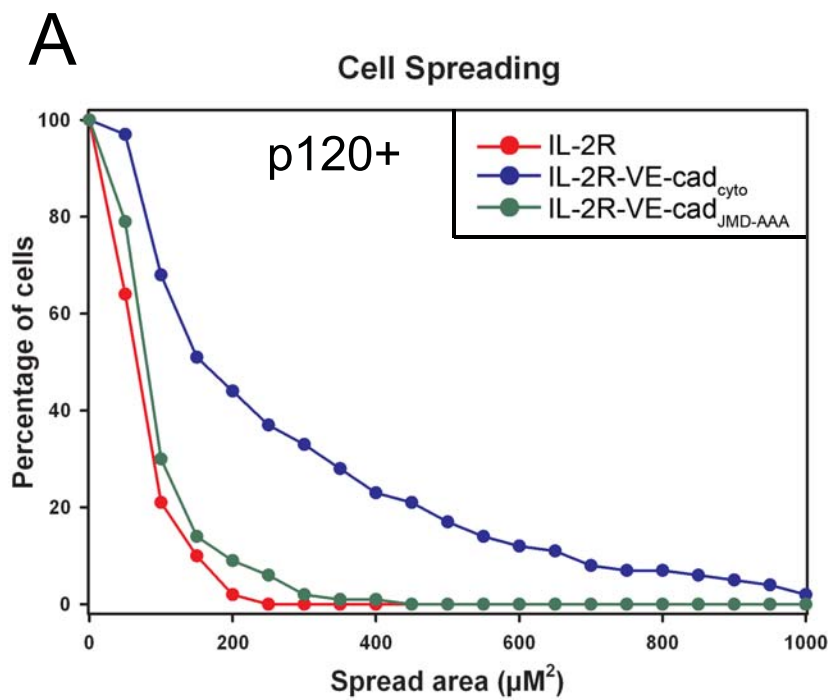


Figure 3.7

**A** Cell forms initial adhesive contact with its substrate



**B** p120 at adherens junctions promotes cell spreading by activating Rac1 and increasing the amount of membrane available for adhesion by locally regulating actin



**C** Linkage to the actin cytoskeleton through  $\beta$ -catenin stiffens the cell and makes it more resistant to shear force (strengthens adhesion)



**D** By limiting the available spreading area by blocking the p120-VE-cadherin interaction, the stiffening effects of actin are limited to a smaller area



Figure 3.8