Supplemental material

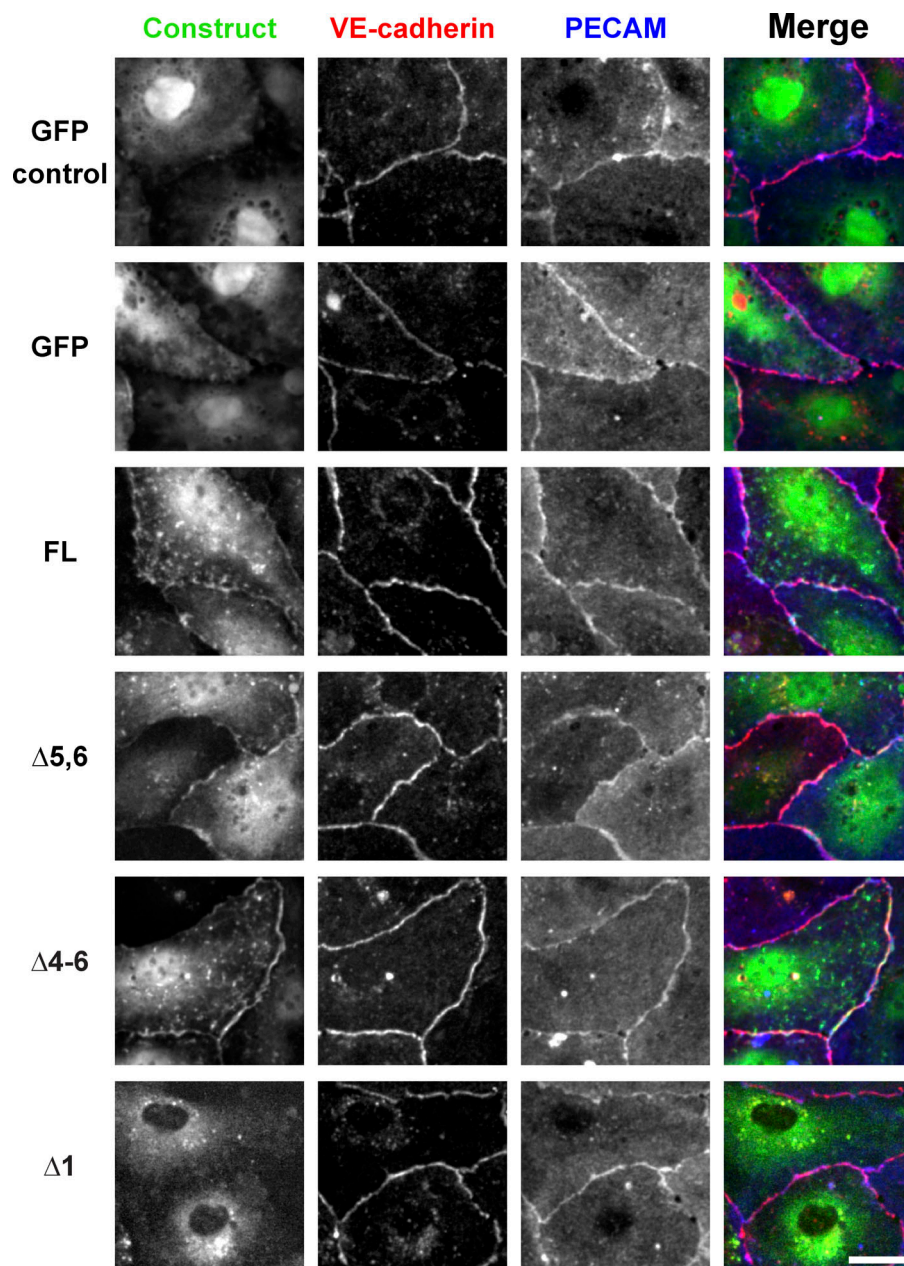**Figure S1. IQGAP1 knockdown and reexpression constructs have no effect on VE-cadherin or PECAM distribution.** iHUVECs were transduced with control shRNA (top row) or the knockdown shRNA (other rows) and the indicated expression constructs as described in Materials and methods and confirmed in Fig. 7. The monolayers were then activated with TNFα, stimulated overnight, fixed, and probed for PECAM and VE-cadherin. Samples were then imaged using confocal microscopy. Images were collected under identical settings and adjusted to preserve any differences between the different samples.
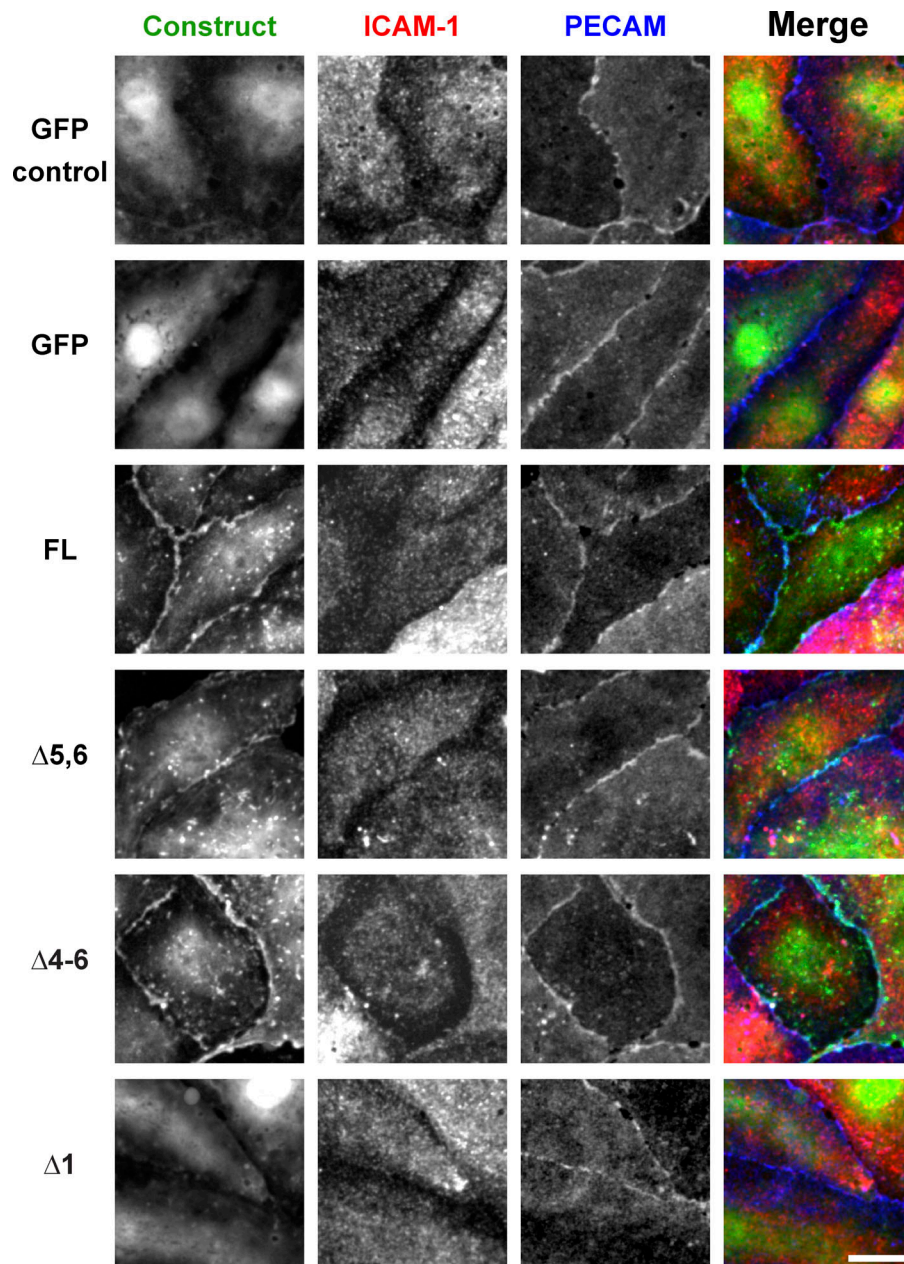
Figure S2.   **IQGAP1 knockdown and reexpression constructs have no effect on ICAM-1 distribution.** iHUVECs were transduced with control shRNA (top row) or the knockdown shRNA (other rows) and the indicated expression constructs as described in Materials and methods and confirmed in Fig. 7. The monolayers were then activated with TNFα, stimulated overnight, fixed, and probed for PECAM and ICAM-1. Samples were then imaged using confocal microscopy. Images were collected under identical settings and adjusted to preserve any differences between the different samples.
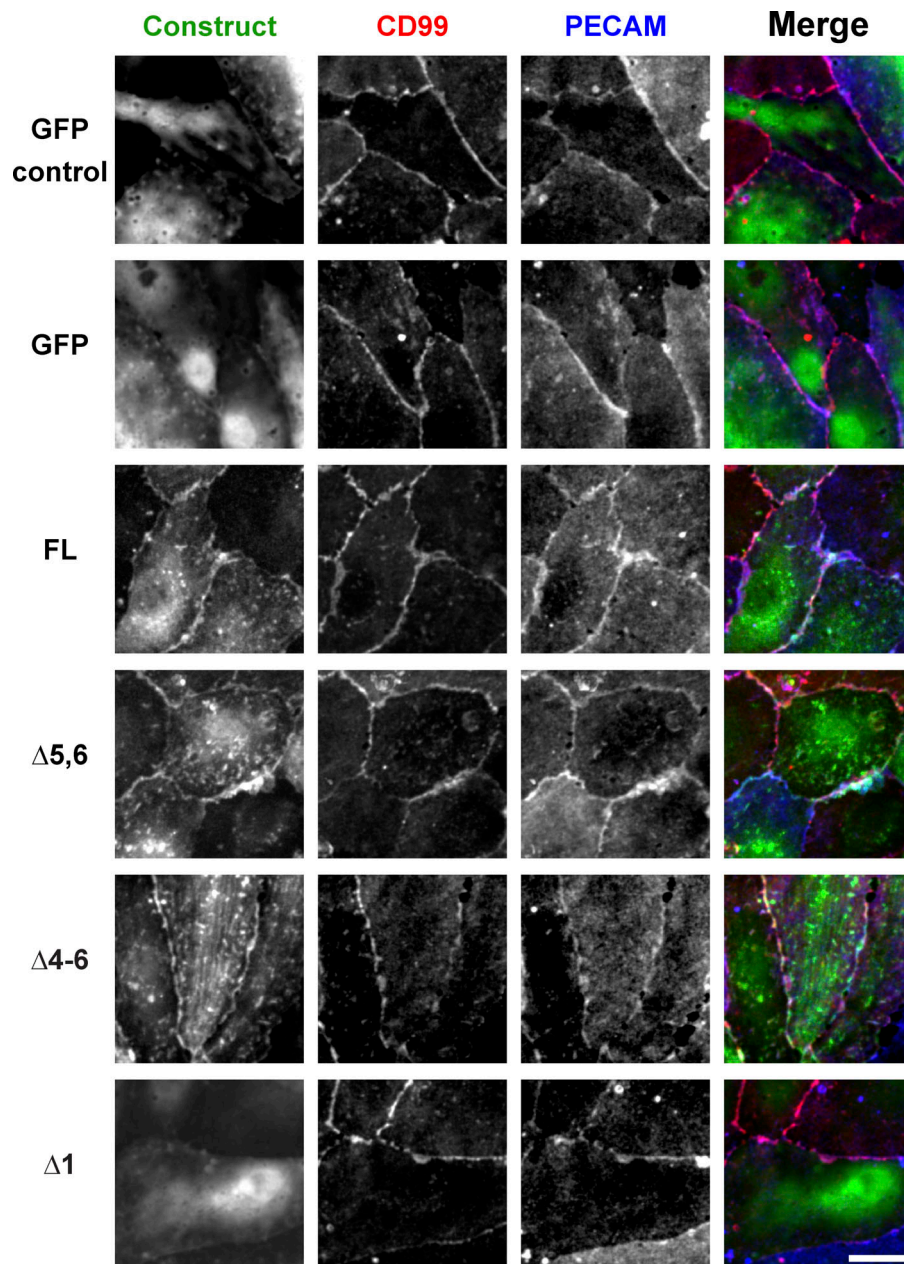
Figure S3. **IQGAP1 knockdown and reexpression constructs have no effect on CD99 distribution.** iHUVECs were transduced with control shRNA (top row) or the knockdown shRNA (other rows) and the indicated expression constructs as described in Materials and methods and confirmed in Fig. 7. The monolayers were then activated with TNFα, stimulated overnight, fixed, and probed for PECAM and CD99. Samples were then imaged using confocal microscopy. Images were collected under identical settings and adjusted to preserve any differences between the different samples.
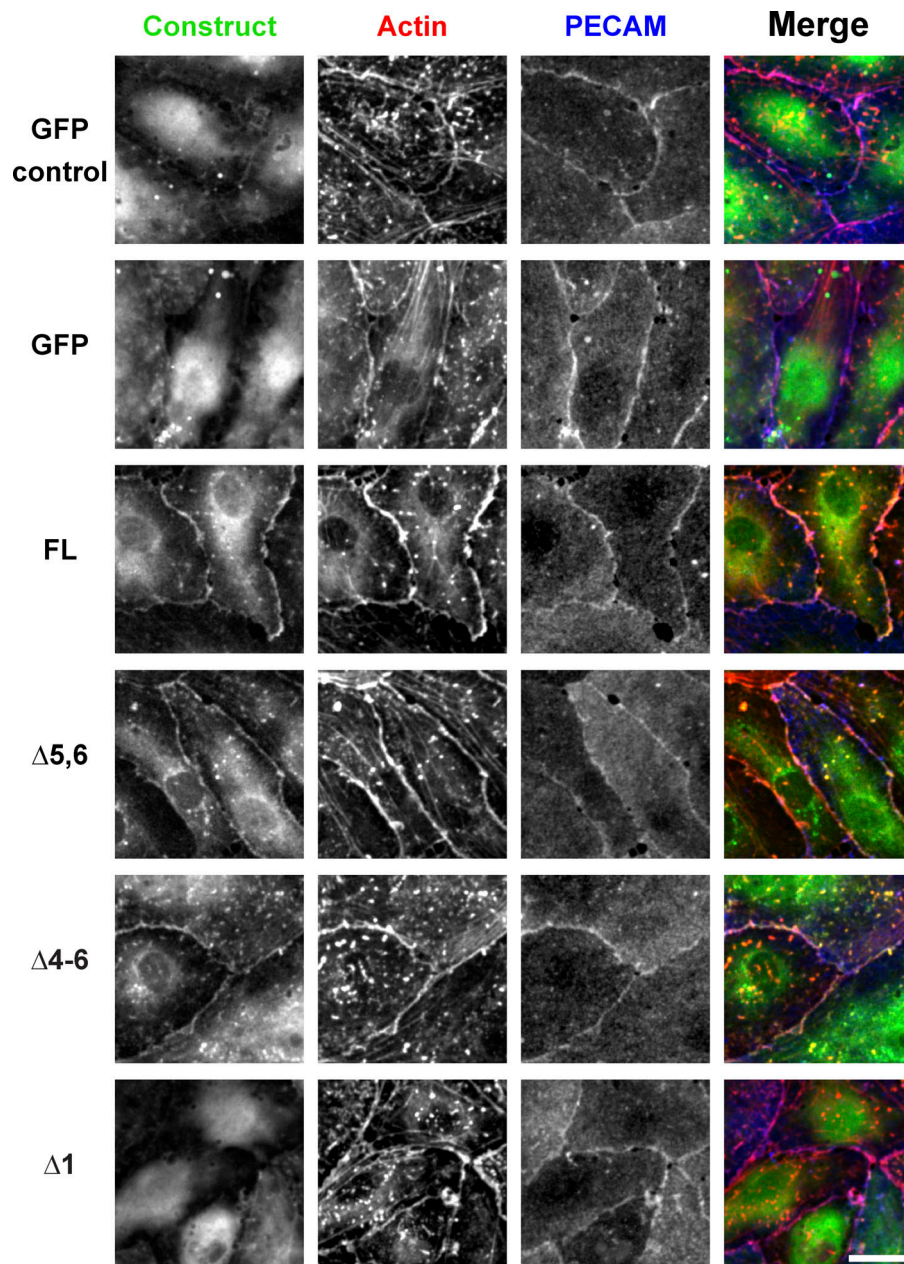
Figure S4. **IQGAP1 knockdown and reexpression constructs have no effect on the actin network.** iHUVECs were transduced with control shRNA (top row) or the knockdown shRNA (other rows) and the indicated expression constructs as described in Materials and methods and confirmed in Fig. 7. The monolayers were then activated with TNFα, stimulated overnight, fixed, and probed for PECAM and actin (stained with fluorescent-conjugated phalloidin). Samples were then imaged using confocal microscopy. Images were collected under identical settings and adjusted to preserve any differences between the different samples.
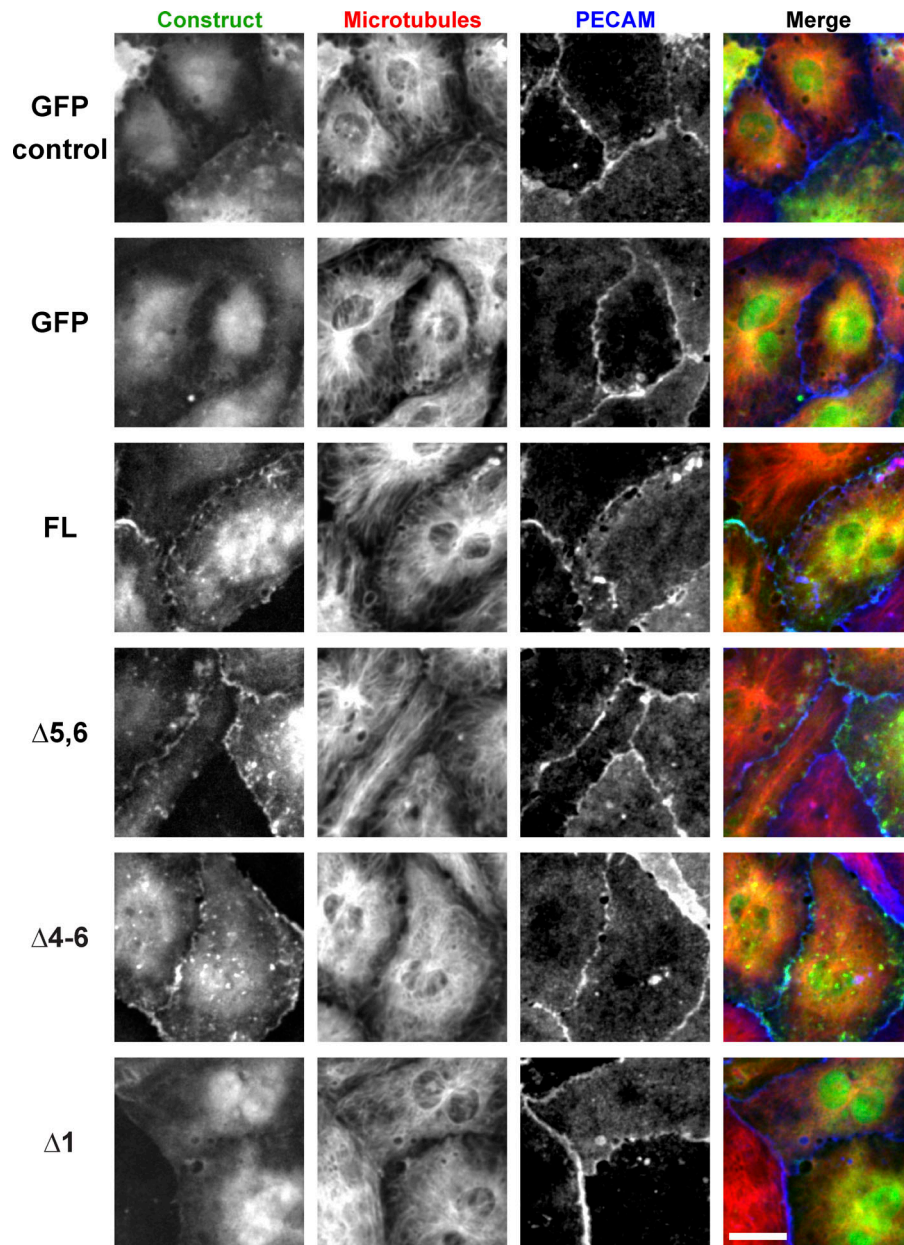
Figure S5. **IQGAP1 knockdown and reexpression constructs have no effect on the microtubule network.** iHUVECs were transduced with control shRNA (top row) or the knockdown shRNA (other rows) and the indicated expression constructs as described in Materials and methods and confirmed in Fig. 7. The monolayers were then activated with TNFα, stimulated overnight, fixed, and probed for PECAM and microtubules. Samples were then imaged using confocal microscopy. Images were collected under identical settings and adjusted to preserve any differences between the different samples.
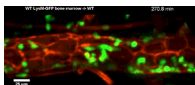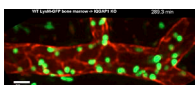

Video 1. **Representative IVM recording of a WT mouse that received WT (LysM-GFP) bone marrow.** Time stamp denotes elapsed time from the injection of the inflammatory stimulus. Playback speed is 7 frames/s.

Video 2. **Representative IVM recording of an IQGAP$^{-/-}$ mouse that received WT (LysM-GFP) bone marrow.** Time stamp denotes elapsed time from the injection of the inflammatory stimulus. Playback speed is 7 frames/s.