Figure S1. ILK-deficient cells spread and polarize more slowly than control cells on FN-coated surfaces
ILK-expressing fibroblasts (ILK^{+/+}) (A) and cells deficient in the ILK protein (ILK^{-/-}) (B) were plated for the indicated time, and then examined by fluorescence microscopy for the distributions of actin (green) and vinculin (pink). Note that the ILK-null cells display attenuated spreading, cell polarization and assembly of stress fibers.
Figure S2. Comparison of tomographic data concerning FARP structure in ILK−/− and ILKf/f cells.

(A) Factor maps resulting from principle component analysis of the projected adhesion-related particles. In both ILK−/− (left panel) and ILKf/f cells (right panel), we found that FARPs cluster into three distinct structural classes, which correspond to rings of three sizes (see also Fig. 3G). (B) Histograms representing the number of radiating whiskers per particle (mean values: 2.89±1.04 and 2.63±0.98) in ILK−/− and ILKf/f cells, respectively. (C) Histograms representing the normalized angular deviation of the radiating filaments from the protrusion angle in the respective tomograms (0°).
Figure S3. Quantification of total levels of Vinculin (A) and Tensin (B) in ILK f/f and ILK-/- cells.

(A). Western blot analysis, demonstrating that total levels of vinculin (vin) in ILK f/f and the knockout ILK -/- cell lines are essentially identical. Vinculin levels were normalized by comparison to the intensity of the Tubulin (tub) band.

(B). Microscopy-based quantification of immunofluorescently labeled tensin in ILK f/f and the knockout ILK -/- cell lines. This analysis indicated that the total levels of tensin in the ILK-/- cell line is about 5 times higher that they measured in the control ILKf/f cells (notably, the tensin antibodies used here are the same ones used for quantification of tensin in FAs).
Figure S4. Nascent focal complexes are detected in ILK f/f but not in ILK +/- cells.

Movie frames from movie S1 and S2 (ILK +/- and ILK f/f cells, respectively) indicate the formation of focal complexes by ILK f/f (arrow) while these structures were not detected in ILK +/- cells.

**Movie S1:** ILK +/- cells transfected with YFP-Vinculin imaged for 3 hours. Images are taken every 2min

**Movie S2:** ILK f/f cells transfected with YFP-Vinculin imaged for 3 hours. Images are taken every 2min
Movie S1. ILK<sup>−/−</sup> cells transfected with YFP-Vinculin imaged for 3 hours. Images were taken every 2 min.

Movie S2. ILK<sup>fl/fl</sup> cells transfected with YFP-Vinculin imaged for 3 hours. Images were taken every 2 min.