Supplementary Figures

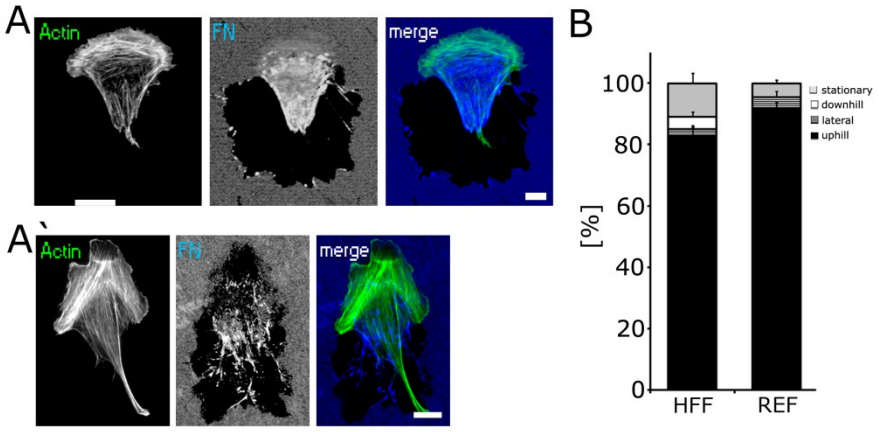

Figure S1.

(A) During migration CEFs remove FN from the growth substrate at the trailing edge when FN is **(A)** coated via gold-thiol chemistry or **(A`)** adsorbed to glass coverslips. Scale bars: 10 µm

(B) Quantitative analysis of fibroblasts during a 120 minute interval reveals that 83% of all human foreskin fibroblasts (HFF; N = 5; n = 511) and 92% of all Rat embryonic fibroblasts (REF; N = 3; n = 95) migrate uphill on gradients with 2x2 µm FN dots and a 6% slope. Error bars indicate s.e.m.

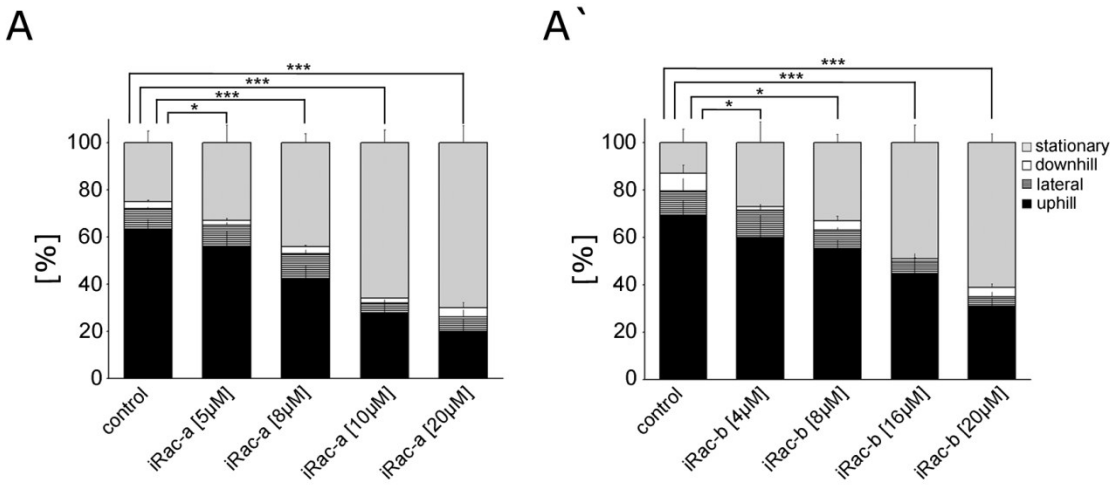

Figure S2.

(A) The pharmacological inhibitors EHT 1864 (iRac a) (A) and EHop-016 (iRac b) **(A`)** were used to interfere with Rac function. The application of both inhibitors in the haptotaxis assay results in a reduction of migrating fibroblasts in a dose dependent manner. However, fibroblasts that are still migrating show no change in the percentage of uphill migration (iRac a: control; N = 7; n = 566; 5 µM; N = 5, n = 335; 8 µM; N = 6, n = 347; 10 µM; N = 5, n = 231; 20 µM; N = 3, n = 59; iRac b: control: N = 3; n = 91; 4 µM; N = 4, n = 105; 8 µM; N = 3, n = 107; 16 µM; N = 4, n = 110; 20 µM; N = 5, n = 143; chi-square test, *p < 0,05; *** p < 0.001). Error bars indicate s.e.m.