Supplemental Materials

Molecular Biology of the Cell

Ribeiro et al.

Supplemental Material

Supplemental Figure 1. MSD plots of individual cell trajectories expressing α-PS (A and C) or not (B and D) and plated on surfaces functionalized with vitronectin (A and B) or Con A (C and D). MSD plot of Figure 2B is an ensemble average of these individual trajectories. Y axis scale of graph A is different from the others. More than 20 cells from 2 independent experiments were analyzed.

Supplemental Figure 2. (A) MSD plots of individual cell trajectories expressing α-PS and plated on surfaces with different rigidities: 2 MPa, 5 kPa and glass and functionalized with vitronectin. MSD plot of Figure 3C is an ensemble average of these individual trajectories. More than 30 cells from 2 independent experiments were analyzed. (B) MSD plots of individual cell trajectories expressing α-PS after after 5 day RNAi of indicated proteins. MSD plot of Figure 3F is an ensemble average of these individual trajectories. More than 30 cells from 2 independent experiments were analyzed.

Supplemental Figure 3. Confinement ratio (ratio of the displacement of a cell to the total length that the cell travelled for 1 hr) of cell trajectories plated in different cell surfaces (A) or after 5 day RNAi of indicated proteins (B). Mean ± SD (n > 20cells from 2 independent experiments).

Supplemental Figure 4. Kymographs of cell slices expressing α-PS (A) and after 5 day RNAi treatment for Fak (B) and Pak3 (C).). Bar, 5 μm.

Supplemental Figure 5. Relative frequency of average Focal Adhesion area after 5-day RNAi treatment for Myosin II and control cells. Average and SD values are indicated in the table (>30 cells per condition)

Supplemental Movie 1. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP corresponding to stills of the cell showed in Figure 4B. Acquisition every 2 min for 4 hr; 12 fps. Time, hr:min. Bar, 5 µm.

Supplemental Movie 2. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP corresponding to stills of the cell showed in Figure 4C. Acquisition every 2 min for 4 hr; the movie plays at 12 fps. Time, hr:min. Bar, 5 µm.

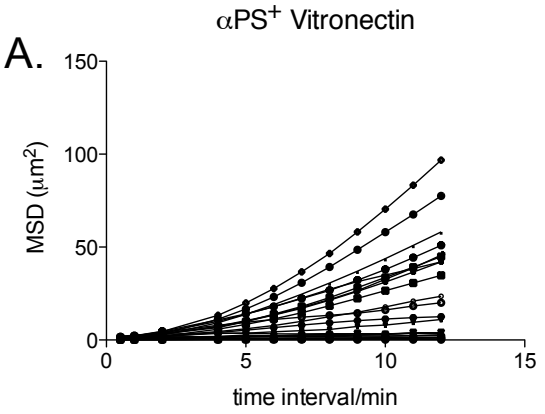
Supplemental Movie 3. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP after 5-day RNAi treatment for FAK. TIRF microscopy imaging every 2 min for 3 hr; the movie is playing at 12 fps. Time, hr:min. Bar, 5 µm.

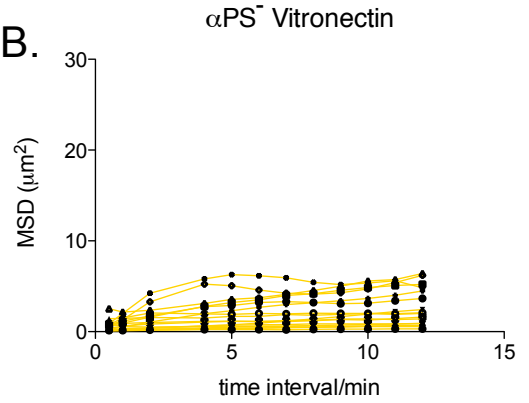
Supplemental Movie 4. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP after 5-day RNAi treatment for FAK. TIRF microscopy imaging every 2 min for 3 hr; the movie is playing at 12 fps. Time, hr:min. Bar, 5 µm.

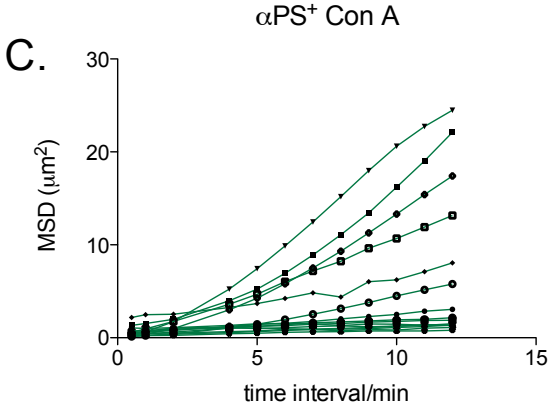
Supplemental Movie 5. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP after 5-day RNAi treatment for Pak3. TIRF microscopy imaging every 2 min for 3 hr; the movie is playing at 12 fps. Time, hr:min. Bar, 5 µm.

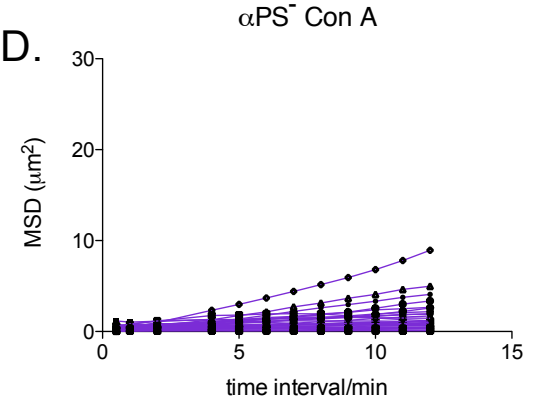
Supplemental Movie 6. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP after 5-day RNAi treatment for Pak3. TIRF microscopy imaging every 2 min for 3 hr; the movie is playing at 12 fps. Time, hr:min. Bar, 5 μm.

Supplemental Movie 7. Live cell imaging of α-PS$^+$ expressing p130Cas-GFP corresponding to stills of the cell showed in Figure 4F. Acquisition every 2 min for 3 hr; the movie plays at 12 fps. Time, hr:min. Bar, 5 μm.

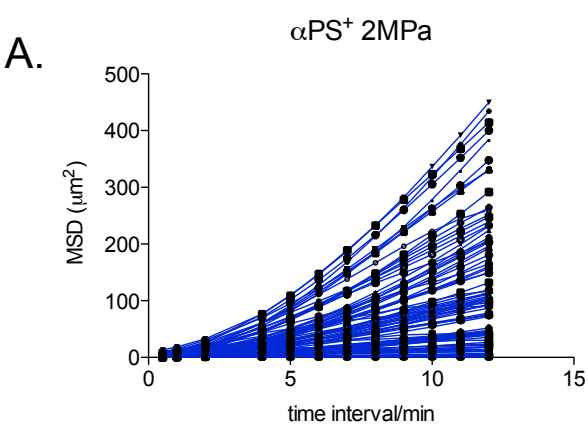


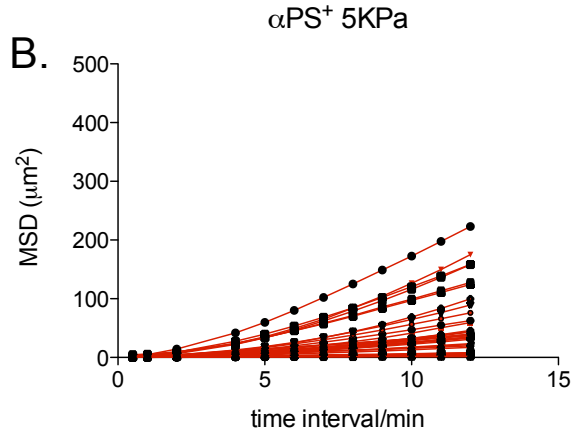


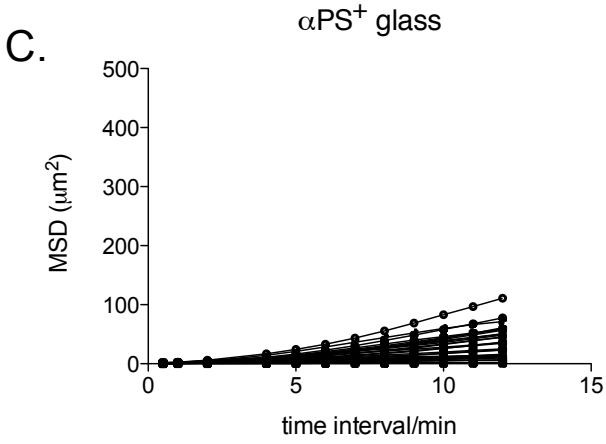




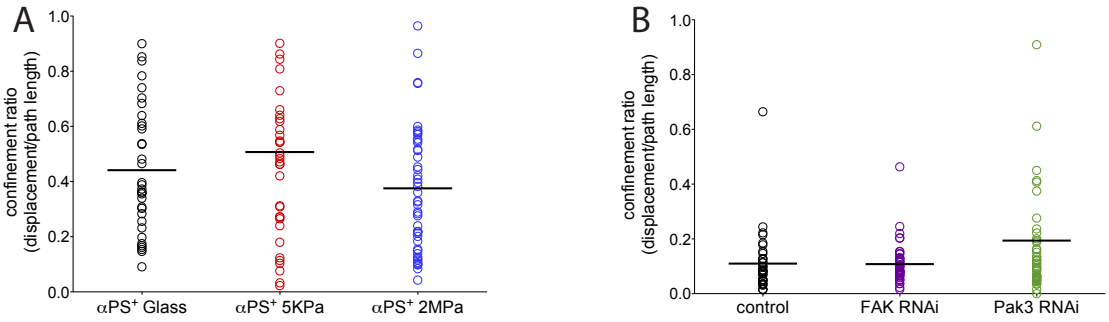
Supplementary Figure 1





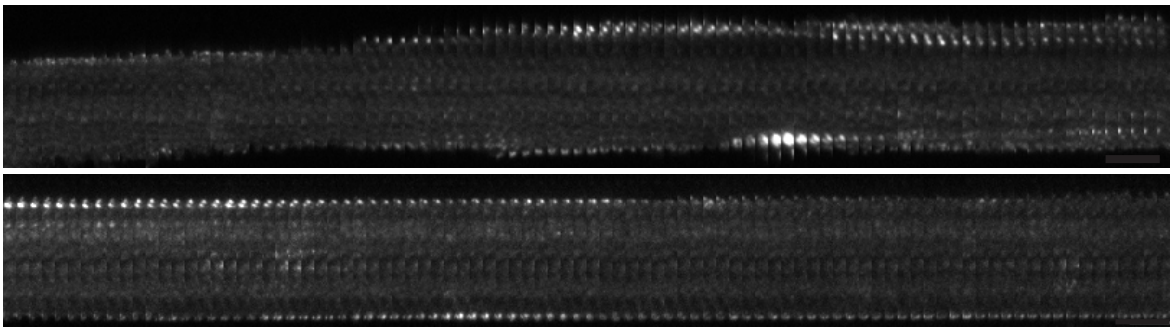


Supplementary Figure 2

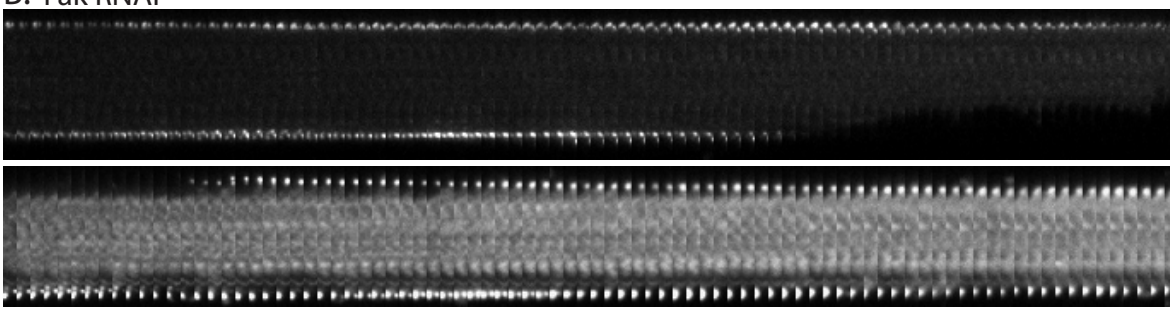


Supplemental Figure 3

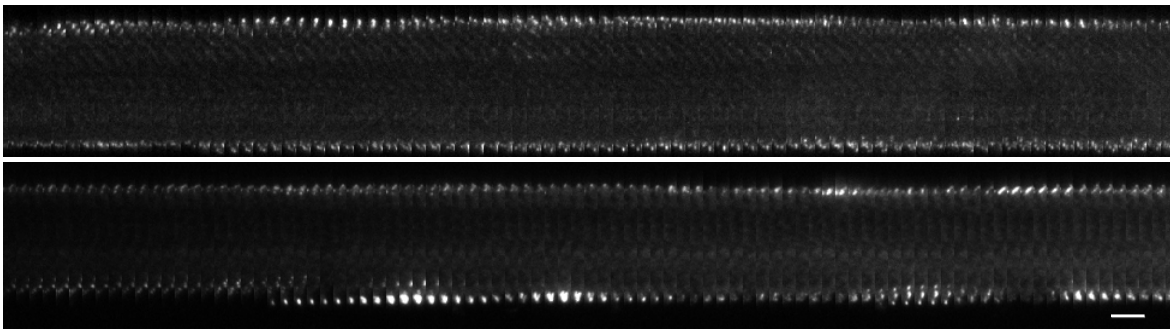
A. Control RNAi



B. Fak RNAi

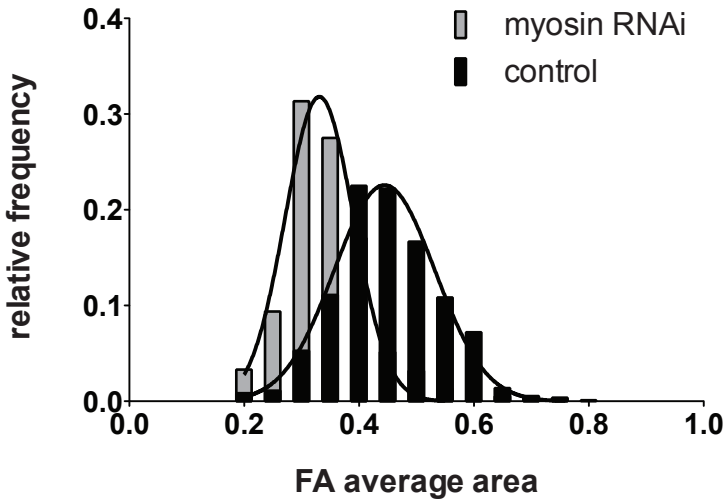


C. Pak3 RNAi



10 min

Supplemental Figure 4



	control	myosin RNAi
Amplitude	0.2257	0.3181
Mean	0.4445	0.3310
SD	0.08761	0.05934