

Description of Additional Supplementary Files

Captions for Supplementary Movies

Supplementary Movie 1. Time-lapse images of SNAP-SiR647-tagged actin in a representative WT NIH 3T3 fibroblast on 0.6 kPa, 1.3 kPa, 2.6 kPa, 6kPa and 12.7 kPa gel, from left to right, overlaid with color-coded flow vector field. The time interval per frame: 6 second. Playing speed: 10 frames/sec. Duration of the movie: 3 minutes. Scale bar: 10 μm .

Supplementary Movie 2. Time-lapse images of SNAP-SiR647-tagged actin in a representative BBS-treated NIH 3T3 fibroblast on 0.6 kPa, 1.3 kPa, 2.6 kPa, 6kPa and 12.7 kPa gel, from left to right, overlaid with color-coded flow vector field. The time interval per frame: 6 second. Playing speed: 10 frames/sec. Duration of the movie: 3 minutes. Scale bar: 10 μm .

Supplementary Movie 3. Time-lapse images of SNAP-SiR647-tagged actin in a representative CK666-BBS-treated NIH 3T3 fibroblast on 0.6 kPa, 1.3 kPa, 2.6 kPa, 6kPa and 12.7 kPa gel, from left to right, overlaid with color-coded flow vector field. The time interval per frame: 6 second. Playing speed: 10 frames/sec. Duration of the movie: 3 minutes. Scale bar: 10 μm .

Supplementary Movie 4. Time-lapse images of SNAP-SiR647-tagged actin in a representative SMIFH2-BBS-treated NIH 3T3 fibroblast on 0.6 kPa, 1.3 kPa, 2.6 kPa, 6kPa and 12.7 kPa gel, from left to right, overlaid with color-coded flow vector field. The time interval per frame: 6 second. Playing speed: 10 frames/sec. Duration of the movie: 3 minutes. Scale bar: 10 μm .

Supplementary Movie 5. Time-lapse images of SNAP-SiR647-tagged actin in a representative LatA-BBS-treated NIH 3T3 fibroblast on 0.6 kPa, 1.3 kPa, 2.6 kPa, 6kPa and 12.7 kPa gel, overlaid with color-coded flow vector field. The time interval per frame: 6 second. Playing speed: 10 frames/sec. Duration of the movie: 3 minutes. Scale bar: 10 μm .