

Figure S1. Quasi bipolar model fits. Theoretical fit (lines) to experimental data (black squares). K/γ and ω are extracted from the best fit (red solid line), while the fits that bound the experimental data give the minimum (light blue dashed line) and maximum (dark blue dashed line) values. Data are from samples containing actin with $L \sim 90$ nm (*left*) and $L \sim 270$ nm (*right*).

Movie S1. Coalescence of two droplets composed of 1 μ M actin with *L* ~ 90 nm and 4.4 μ M FUS. The time when two droplets initially make contact at the beginning of coalescence is defined as *t* = 0 s. Time is in min:sec.

Movie S2. Droplet nucleation and growth. Droplets are composed of 1 μ M actin with *L* ~ 135 nm and 4.4 μ M FUS. The time at which FUS and actin are initially mixed together is defined as *t* = 0 s. Time is in min:sec.