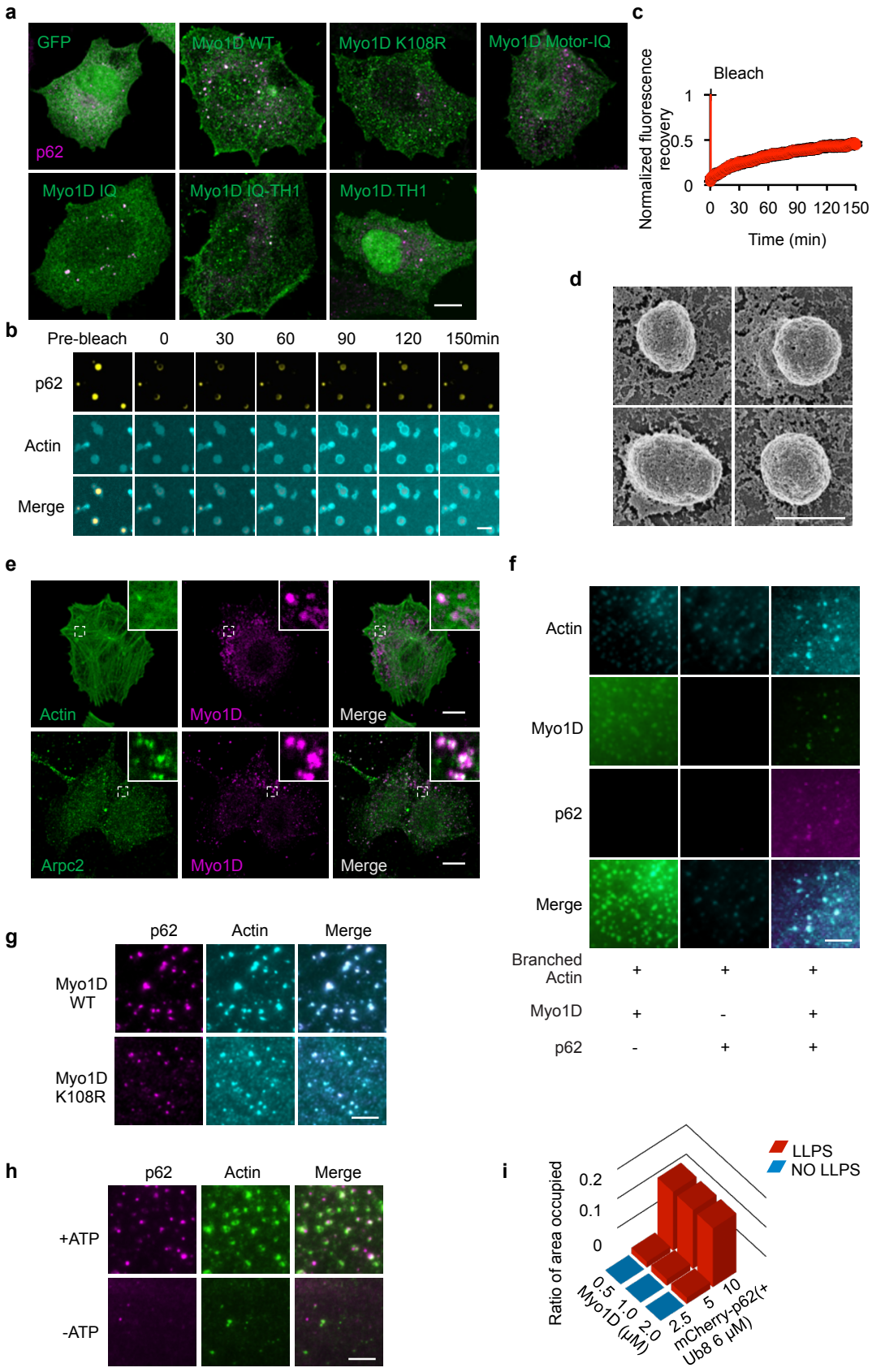

Supplementary information, Figure S6. Myo1D promotes the coalescence of p62 bodies, related to Figure 4

(a) Myo1D knockout NRK cells were transfected with GFP, GFP-Myo1D, GFP-Myo1D K108R GFP-Myo1D Motor-IQ, GFP-Myo1D IQ, GFP-Myo1D IQ-TH1 or GFP-Myo1D TH1 then stained with antibodies against GFP and p62. Scale bar, 10 μm.

(b) Fluorescence intensity recovery of reconstituted p62 bodies after photo bleaching.

(c) Quantification of fluorescence intensity recovery of photobleached p62 bodies (n = 3). Scale bar, 5μm.

(d) SEM image showing the structure of a reconstituted p62 body on the Arp2/3-derived actin network. Scale bar, 1 μm.

(e) Cells were stained with phalloidin and Myo1D or antibodies against Arpc2 and Myo1D. Scale bar, 10 μm.

(f) Myo1D were labeled with Alexa-488. Total internal reflection fluorescence spectroscopy (TIRF) images showing that p62 body formation. PWCA (300 nM), Actin (1 μM, alexa-647 phalloidin labeled), Arp2/3 complex (100 nM), and CapZ (600 nM) were pre-loaded into the chamber. Then Myo1D (100 nM Alexa-488 labeled), p62 (0.5 μM), and Ub8 (3 μM) were added into the reconstitution system. Scale bar, 5 μm.

(g) Condensate formation during in vitro assays in the presence of WT and K108R Myo1D. Scale bar, 5μm.

(h) Condensate formation during in vitro assays in the presence or absence of ATP. Scale bar, 5μm.

(e) A phase diagram of p62, Ub8 and Myo1D in the indicated concentration ranges.