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APPROVED BY Frontiers Editorial Office, Frontiers Media SA, Switzerland

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RECEIVED 08 August 2023 ACCEPTED 09 August 2023 PUBLISHED 18 August 2023

### CITATION

Cheng X, Ullo MF and Case LB (2023), Corrigendum: Reconstitution of phaseseparated signaling clusters and actin polymerization on supported lipid bilayers. *Front. Cell Dev. Biol.* 11:1274775. doi: 10.3389/fcell.2023.1274775

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# Corrigendum: Reconstitution of phase-separated signaling clusters and actin polymerization on supported lipid bilayers

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### KEYWORDS

phase separation, supported lipid bilayer, actin, ARP2/3 complex, total internal reflection fluorescence microscopy, biochemical reconstitution

### A Corrigendum on

Reconstitution of phase-separated signaling clusters and actin polymerization on supported lipid bilayers

by Cheng X, Ullo MF and Case LB (2022). Front. Cell Dev. Biol. 10:932483. doi: 10.3389/fcell.2022. 932483

In the published article, there was an error in the captions for **Figures 4–6** as published. In these captions, " $0.25 \,\mu$ M" should be " $250 \,\mu$ M." The corrected captions appears below.

"FIGURE 4 | Actin polymerization from phase separated clusters. (A) Total Internal Reflection Fluorescence (TIRF) imaging of 1  $\mu$ M actin (5% labeled by Alexa 647, magenta) polymerization with 3 nM Arp2/3, 250  $\mu$ M ATP, 0.1 mM MgCl<sub>2</sub> and 0.1 mM EGTA, from clusters made from 500 nM Nck (15% labeled by Alexa488, green), 250 nM N-WASP and 2.5 nM His<sub>8</sub>-nephrin on the membrane. (B) Zoom-in view of region indicated by white box in (A). Scale bars, 10  $\mu$ m. Total Internal Reflection Fluorescence (TIRF) penetration depth 200 nm for all channels."

"FIGURE 5 | Actin polymerization with different levels of capping proteins. (A) 1  $\mu$ M actin (5% labeled by Alexa647) polymerization is induced by 3 nM Arp2/3, 250  $\mu$ M ATP, 0.1 mM MgCl<sub>2</sub> and 0.1 mM EGTA, with different amounts of CapZ included in the system (indicated above each image), from clusters made from 500 nM Nck, 250 nM N-WASP and 1.25 nM His<sub>8</sub>-nephrin (15% labeled by Alexa405) on the membrane. Individual images are TIRF image overlays of nephrin-405 shown in cyan and actin-647 shown in magenta. Total Internal Reflection Fluorescence (TIRF) penetration depth 200 nm for all channels. Scale bar, 5  $\mu$ m. (B) Quantification of actin mean and fraction intensity over time for the conditions showed in (A). Actin was selected by selecting the intensity threshold between 250 and 65535 the individual 16-bit images, values for each frame are calculated as described in Section 4.4."

"FIGURE 6 | Representative actin polymerization analysis (A) 1  $\mu$ M actin (5% labeled by Alexa647) polymerization is induced by 3 nM Arp2/3, 6 nM CapZ, 250  $\mu$ M ATP, 0.1 mM MgCl<sub>2</sub> and 0.1 mM EGTA, from clusters made from 1  $\mu$ M Nck, 2  $\mu$ M N-WASP (15% Alexa488) and 1.25 nM His<sub>8</sub>-nephrin on the membrane. Binary mask from segmentation of the N-WASP images. Pixels outside the clusters are

white, pixels inside the clusters are black. Scale bar,  $5 \mu m$ . (B) Quantification of actin polymerization over time for the condition showed in (A). Graph was generated in Matlab. Black dotted lines indicate a linear fit of the five points around the half-max intensity."

The authors apologize for these errors and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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