

Correction

BIOPHYSICS AND COMPUTATIONAL BIOLOGY

Correction for “Nanoparticle-based local translation reveals mRNA as a translation-coupled scaffold with anchoring function,” by Shunnichi Kashida, Dan Ohtan Wang, Hirohide Saito, and Zohar Gueroui, which was first published June 19, 2019; 10.1073/pnas.1900310116 (*Proc. Natl. Acad. Sci. U.S.A.* **116**, 13346–13351).

The authors note that, in Fig. 3C, the label above the second image from the right incorrectly reads “GFP-ABD.” It should instead read “ABD-GFP.” The corrected figure and its legend appear below.

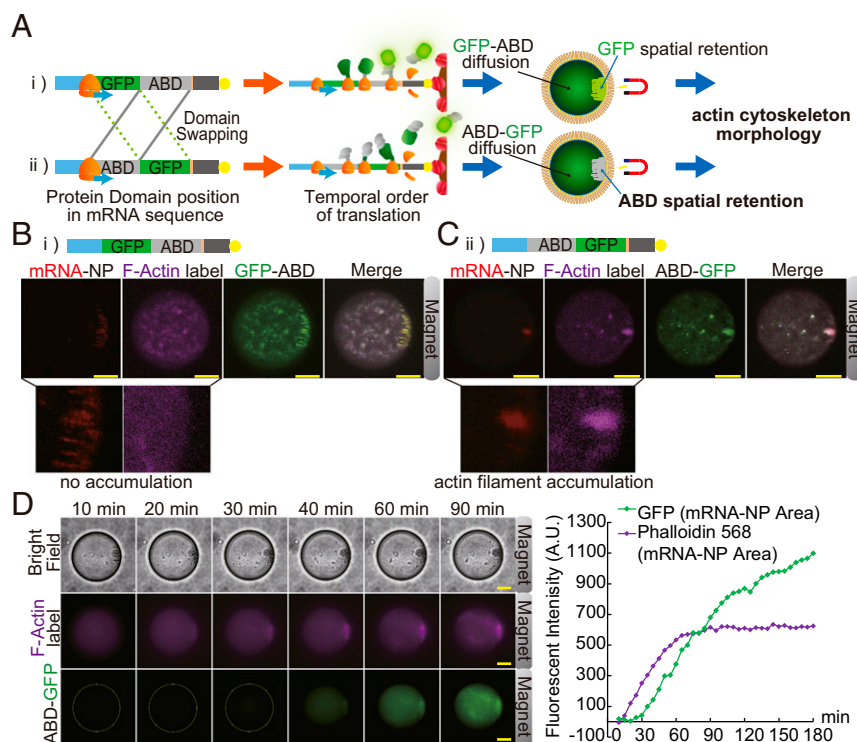


Fig. 3. Spatial control of the F-actin meshwork by localized mRNA translation highlights the key role of spatial retention of actin-binding protein. (A) To assess the effect of the spatial retention of the N-terminal domain of actin-binding protein (ABD) during local translation on the actin filament assembly, two mRNA sequences were designed by swapping the order of ABD and GFP: ABD-GFP and GFP-ABD. These mRNAs were translated from localized mRNA-NPs in HeLa extract droplets. The translation of mRNA(GFP-ABD)-NPs was designed to spatially retain N-terminal GFP on the localized mRNA-NPs, whereas the translation of mRNA(ABD-GFP)-NPs was designed to spatially retain N-terminal ABD on the localized mRNA-NPs. Representative confocal fluorescence microscopy images of Cy5-mRNA-NPs, phalloidin-568 (F-actin marker), and GFP-ABD (B) or ABD-GFP (C) are shown after 3 h of translation. (B, *Magnified views*) Formation of a homogenous F-actin meshwork without any local enrichment of filaments in the vicinity of the mRNA-NPs. (C, *Magnified views*) Formation of a local and dense F-actin meshwork colocalizing with mRNA-NPs. (D, *Left*) Representative time-lapse images of F-actin formation upon the translation of localized mRNA(ABD-GFP)-NPs. (D, *Right*) Quantification of the mean fluorescence intensity of phalloidin-568 and GFP signal as a function of time in the mRNA-NP area. A.U., arbitrary unit. (Scale bars: B–D, 20 μ m.)

Published under the [PNAS license](#).

Published online August 12, 2019.

www.pnas.org/cgi/doi/10.1073/pnas.1912167116