

Correction: Talin tension sensor reveals novel features of focal adhesion force transmission and mechanosensitivity

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In the original version of this article, the Discussion included the following text:

While this manuscript was in revision, Austen et al. (2015) described an alternative talin-TS based on folded peptide hairpins that denature at forces in the 7–11-pN range. Although most of their results are consistent with ours, they found that a significant fraction of their 11-pN sensor was open in FAs, suggesting higher force. The hairpin, however, as expected for a folded domain, showed hysteresis when stretched in vitro; thus, it requires relatively high force to open but then can be maintained in the open state under lower tension. This sensor thus will report values that are biased toward the maximal forces, whereas the flagelliform spring is reversible and so should report mean tension. Analysis of forces on immobilized RGD peptides using folded domains or DNA hairpins also support the idea that peak forces can be high (Wang and Ha, 2013; Zhang et al., 2014; Galior et al., 2016), but these results cannot be interpreted as mean forces.

After publication, the authors realized that the characterization of this related work was inaccurate. The new text reads: While this manuscript was in revision, Austen et al. (2015) described an alternative talin-TS based on folded peptide hairpins that denature at forces in the 7–11-pN range. Most of their results are consistent with ours; however, they found that a significant fraction of their 11-pN sensor was open in FAs, suggesting higher force. Any differences in reported tension across talin could be caused by some combination of differences in the way the in vitro calibrations are extrapolated to in vivo measurements or to differences in cell types and conditions.

As a result of these changes, the references Wang and Ha, 2013; Zhang et al., 2014; and Galior et al., 2016 have been removed from the reference list.

The authors apologize for any confusion this may have caused. The changes have been made in both the PDF and the online version. The error remains only in the print version.