***eLife’s* transparent reporting form**

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* You should state whether an appropriate sample size was computed when the study was being designed
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Materials and Methods: Library generation and transposon insertion sequencing (Tn-seq) and Quantification and Statistical Analyses sections

**Replicates**

* You should report how often each experiment was performed
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Material and Methods

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* Report exact p-values wherever possible alongside the summary statistics and 95% confidence intervals. These should be reported for all key questions and not only when the p-value is less than 0.05.

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(For large datasets, or papers with a very large number of statistical tests, you may upload a single table file with tests, Ns, etc., with reference to sections in the manuscript.)

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* Indicate how samples were allocated into experimental groups (in the case of clinical studies, please specify allocation to treatment method); if randomization was used, please also state if restricted randomization was applied
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Please indicate the figures or tables for which source data files have been provided:

Numerical output data from getCellDimensions, getSignal1, and signal1\_alonglength scripts, used for cell size and cell fluorescence quantification, can be found in excel spreadsheets labeled with figure number and panel. Excel files also contain statistical tests used to analyze significance. Matlab scripts and uncropped blots/gels/plate images can be found as source data files linked to the figures.