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

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**Sample-size estimation**

* You should state whether an appropriate sample size was computed when the study was being designed
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* If no explicit power analysis was used, you should describe how you decided what sample (replicate) size (number) to use

Please outline where this information can be found within the submission (e.g., sections or figure legends), or explain why this information doesn’t apply to your submission:

All details related to the number of samples for each calculated mean and standard deviations are given in the manuscript. They can be found in the Results section where the measurement is only mentioned and in figure legends where the results are plotted graphically. Note than some averages are global and the number of samples represent the number of independent experiments whereas some averages are local and the number of samples represent the number of cells analyzed.

No explicit power analysis was used as the results were consistent between experiments.

**Replicates**

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* Statistical analysis methods should be described and justified
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* For each experiment, you should identify the statistical tests used, exact values of N, definitions of center, methods of multiple test correction, and dispersion and precision measures (e.g., mean, median, SD, SEM, confidence intervals; and, for the major substantive results, a measure of effect size (e.g., Pearson's r, Cohen's d)
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No other statistical analysis was used in the paper.

(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:

For global measurements reported in the text as mean+-std, detailed measurements are reported Source Data 1. Each figure and figure supplement comes with its own source data recapitulating all relevant information on these figures. For numerical simulations, codes are also provided within these source data files.