***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

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Sample sizes (# of mice and # of replicates) can be found in the Methods section of the paper.

**Replicates**

* You should report how often each experiment was performed
* You should include a definition of biological versus technical replication
* The data obtained should be provided and sufficient information should be provided to indicate the number of independent biological and/or technical replicates
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* Criteria for exclusion/inclusion of data should be clearly stated
* High-throughput sequence data should be uploaded before submission, with a private link for reviewers provided (these are available from both GEO and ArrayExpress)

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TRAP-seq and CLIP-seq data are uploaded to GEO: GSE174303, <https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE174303>, token: qbqdiogwzxuflob. Information about replicates is found in the methods section and figure legends of the manuscript.

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* Statistical analysis methods should be described and justified
* Raw data should be presented in figures whenever informative to do so (typically when N per group is less than 10)
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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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Experimental groups were determined by genotype as described in the methods section of the paper.

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Please indicate the figures or tables for which source data files have been provided:

Figure 1B source data is found in Supplemental Table 1

Figure 2B source data is found in Supplemental Table 4

Figure 3A/B source data is found Supplemental Table 5

Figure 6A source data is found in Supplemental Table 7

Figure 7E source data is found in Supplemental Table 11