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Reporting Summary

Nature Research wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Research policies, see<u>Authors & Referees</u> and the<u>Editorial Policy Checklist</u>.

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.				
n/a	Confirmed			
	x	The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement		
	x	A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly		
	x	The statistical test(s) used AND whether they are one- or two-sided Only common tests should be described solely by name; describe more complex techniques in the Methods section.		
×		A description of all covariates tested		
x		A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons		
	x	A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)		
×		For null hypothesis testing, the test statistic (e.g. F, t, r) with confidence intervals, effect sizes, degrees of freedom and P value noted Give P values as exact values whenever suitable.		
X		For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings		
x		For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes		
x		Estimates of effect sizes (e.g. Cohen's d, Pearson's r), indicating how they were calculated		
		Our web collection on statistics for biologists contains articles on many of the points above.		

Software and code

Policy information about availability of computer code				
Data collection	GraphPad Prism 8			
Data analysis	GraphPad Prism 8			

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors/reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research guidelines for submitting code & software for further information.

Data

Policy information about availability of data

All manuscripts must include a <u>data availability statement</u>. This statement should provide the following information, where applicable: - Accession codes, unique identifiers, or web links for publicly available datasets

- A list of figures that have associated raw data
- A description of any restrictions on data availability

The RNA-seq data have been deposited in the NCBI Gene Expression Omnibus (GEO) under accession number GSE140834. The raw FASTQ files have been deposited in the NCBI Sequence Read Archive (SRA) under accession number SRP231423. The source data underlying Figs. 1–5 and Supplementary Figs. 1–5 are provided as a Source Data file. The Arabidopsis lines generated in this study are available from the corresponding author on reasonable request.

Field-specific reporting

Life sciences study design

An studies must disclose on these points even when the disclosure is negative.			
Sample sizes were determined based on previous studies in the field to enable statistical analyses and ensure reproducibility.			
No data were excluded from this study.			
Sample sizes have been increased wherever possible. All attempts for replication were successful.			
Experiments described here were not randomized.			
This was not practical given our design.			

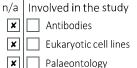
All studies must disclose on these points even when the disclosure is negative

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

Methods n/a Involved in the study



- Animals and other organisms
- Human research participants
- Clinical data



ChIP-seq
Flow cytometry

MRI-based neuroimaging