

## MANUSCRIPT CHECKLIST

	Yes	N/A
<b>TITLE</b>		
No more than 15 words		
Does not contain punctuation		
<b>AUTHORS</b>		
Full postal address for all authors is provided		
E-mail addresses provided for all corresponding authors		
Maximum of 6 equally contributing authors (further contributions can be outlined in the author contribution statement)		
Maximum of 6 joint supervisors (further contributions can be outlined in the author contribution statement)		
<b>ABSTRACT</b>		
No more than 150 words		
Does not contain references		
Results of the current study are written in present tense		
Starts with short description of background (2-3 sentences)		
Continues with presentation of the major results ('Here we show' or similar)		
Ends with a description of the paper's conclusion		
<b>MAIN TEXT</b>		
No more than 5,000 words in total (Introduction, Results, Discussion)		
Section order is: Title, Abstract, Introduction, Results, Discussion, Methods, References, End Notes, Figure legends, Tables		
Main text is provided as a Word or Tex document		
Abbreviations are defined at first use		
Genes and genotypes are italicized		
Mathematics: Scalar variables and constants should be italic, vectors should be bold without italics, subscripts and superscripts are displayed in non-italic font unless they are variables. Unit dimensions should be expressed using negative integers (e.g. $\text{kg m}^{-1} \text{s}^{-2}$ not $\text{kg/ms}^2$ ) or the word 'per'		
<b>Introduction</b>		
Less than 1,000 words		
Contains no subheadings		
Introduces the background and rationale for work		
The last paragraph contains a brief summary of both the results and the conclusions (written in present tense)		
Contains no reference to display items (unless overview figures are presented)		
<b>Results</b>		
Divided by subheadings less than 60 characters (incl spaces) that do not contain punctuation		
All data are shown either in the main text or the Supplementary Information		
If personal communication from another laboratory is cited, written permission is provided		
Format of references to Supplementary items is (Supplementary Figure 1), (Supplementary Table 1), (Supplementary Note 1), (Supplementary Data 1), (Supplementary Movie 1)		

## MANUSCRIPT CHECKLIST

	Yes	N/A
<b>Discussion</b>		
Does not contain subheadings		
Does not contain overlap with results section		
<b>METHODS</b>		
Methods are contained within main paper wherever possible		
Divided by subheadings less than 60 characters (incl spaces) that do not contain punctuation		
Contain sufficient detail to repeat experiments (avoid 'as previously described')		
Statement about availability of computer code, if important for main conclusions, is provided as a separate section under the heading "Code availability" after the data availability statement but before the References		
The paper conforms to our requirements on mandatory data deposition (see <a href="http://www.nature.com/authors/policies/availability.html">http://www.nature.com/authors/policies/availability.html</a> )		
For all papers section "Data availability" is provided after the Methods section but before the References containing information on all mandatory and voluntary provision of research data. For further information refer to <a href="http://www.nature.com/authors/policies/data/data-availability-statements-data-citations.pdf">http://www.nature.com/authors/policies/data/data-availability-statements-data-citations.pdf</a>		
<b>REFERENCES</b>		
As a guideline, Articles allow up to 70 references		
Numbered in the order they appear in the text, tables, figures and boxes		
Formatted in Nature Communications style: 'Authors, Title, Journal, Volume, First-last page, (year)'		
References to web-only journals include: 'Authors, Title, Journal, url/doi and year of publication		
References to websites include: 'Authors (if known), Title of page, url and year of publication		
References to preprint servers should be formatted as 'Authors. Preprint title. For example: Preprint at <a href="http://arxiv.org/abs/">http://arxiv.org/abs/</a> YYYY.NNNN (Year)'		
Research datasets may be cited if they have been assigned digital object identifiers (DOIs) and should be formatted as 'Authors. Title. Publisher/repository, doi (year)'. Example: Smith, A. & Doe, J. Title. Figshare <a href="http://dx.doi.org/">http://dx.doi.org/</a> ... (2016)		
Contains only published work or work in press (including doi number)		
Does not contain footnotes		
<b>END NOTES</b>		
Acknowledgements are brief		
Author contributions statement is provided		
Conflict of interest statement is provided		
<b>LEGENDS</b>		
Contain a brief title		
No more than 350 words each		
Every panel is described		
Length of scale bars is defined		
Definitions for new abbreviations/symbols/colours is provided		
Error bars are defined as s.d. or s.e.m.		

### MANUSCRIPT CHECKLIST

	Yes	N/A
<b>DISPLAY ITEMS</b>		
No more than 10 total		
Fit within a column/page (including legend)		
Numbered in the order they appear in the main text		
<b>Figures</b>		
Figures do not contain tables		
Figure panels are arranged into a rectangular shape		
Each panel is labelled with a single letter		
Panels are not subdivided		
Scale bars are included (but not labelled within the figure)		
Blots and gels contain molecular weight or size markers		
Axes are labelled, including units		
Stereo figures sufficient width apart (equivalent points separated by 5.5cm)		
Avoid the use of red and green in figures to avoid confusion for colour-blind readers (magenta and turquoise are alternatives)		
<b>Tables</b>		
Include a title (no punctuation)		
Tables are editable (not embedded as a picture in the document)		
If table legend is required, it is displayed underneath the table		
NMR standard table for structural refinement statistics has been used (please see <a href="http://nature.com/authors/policies/tables-nmr.doc">http://nature.com/authors/policies/tables-nmr.doc</a> )		
X-ray standard table for structural refinement statistics has been used (please see <a href="http://nature.com/authors/policies/tables-xray.doc">http://nature.com/authors/policies/tables-xray.doc</a> )		
Cryo-EM standard table for collection, refinement and validation statistics has been used (please see <a href="http://nature.com/authors/policies/tables-cryo-em.doc">http://nature.com/authors/policies/tables-cryo-em.doc</a> )		
<b>SUPPLEMENTARY INFORMATION</b>		
Provided as a single PDF file (except for Movies, Audio and Data)		
Supplementary items are labelled and contain only these elements: Supplementary Figure 1 / Supplementary Table 1 / Supplementary Note 1 / Supplementary Discussion / Supplementary Methods / Supplementary References. Supplementary References appear at the end of the file.		
Each Supplementary item is cited in the main text		
Figure legends are displayed underneath each figure; ideally, each display item and its corresponding legend fit on one page		
Format of the legends is the same as in the main manuscript and any error bars are defined (please see section above)		
Movie legends are provided in the cover letter		
Supplementary References are numbered sequentially from 1 and are self-contained (they do not refer to the list of References in the main paper; any such papers are duplicated in the list of Supplementary References)		
Where portions of blots and gels have been presented in the main paper, the full blots or gels are included in the Supplementary Information		
Supplementary Information does not contain essential display items (these should be displayed in the main text)		
Supplementary Information does not contain Results		
Supplementary Data files contain titles		
Chemical structures are drawn using a Nature Chemistry Chemdraw template (please see <a href="https://www.nature.com/authors/guides/ChemStructureGuide.pdf">https://www.nature.com/authors/guides/ChemStructureGuide.pdf</a> and <a href="http://www.nature.com/authors/guides/NR_chemdraw_stylesheets.cds">http://www.nature.com/authors/guides/NR_chemdraw_stylesheets.cds</a> )		