

Submission guidelines

Format of articles

Scientific Reports publishes original research in two formats: Article and. However, we strongly recommend that you write concisely and stick to the following guidelines:

- Articles should ideally be no more than 11 typeset pages
- The main text should be no more than 4,500 words (not including Abstract, Methods, References and figure legends)
- The title should be no more than 20 words
- The abstract should be no more than 200 words

We recommend you limit your Methods section to 1,500 words. Make sure it includes adequate experimental and characterization data for others to be able to reproduce your work. You should:

- Include descriptions of standard protocols and experimental procedures.
- Only identify commercial suppliers of reagents or instrumentation when the source is critical to the outcome of the experiments.
- Identify sources for any kits you use in your procedures.
- Include any experimental protocols that describe the synthesis of new compounds.
- Use the systematic name of any new compound and put its bold Arabic numeral in the heading for the experimental protocol, indicating it thereafter by its assigned, bold numeral.
- Describe the experimental protocol in detail, referring to amounts of reagents in parentheses, when possible (eg 1.03 g, 0.100 mmol).
- Use standard abbreviations for reagents and solvents.
- Clearly identify safety hazards posed by reagents or protocols.
- Report isolated mass and percent yields at the end of each protocol.
- Include a brief curriculum vitae

If you're reporting experiments on live vertebrates (or higher invertebrates), humans or human samples, you must include a statement of ethical approval in the Methods section (

Language

All articles should be written in English

Where and how to send the articles

Items must be sent in * .pdf format to the address

int.worldwide.magazine@gmail.com

Board of Evaluation

the articles will be evaluated by the evaluation committee and then published in order of arrival. In case of non-publication, a specific communication will be sent to the author

Ethics declarations

If your research includes human or animal subjects, you will need to include the appropriate ethics declarations in the Methods section of your manuscript.

Figure legends

Please begin your figure legends with a brief title sentence for the whole figure and continue with a short description of what is shown in each panel. Use any symbols in sequence and minimize the methodological details as much as possible. Keep each legend total to no more than 350 words. Provide text for figure legends in numerical order after the references.

Tables

Please submit any tables in your main article document in an editable format (Word or TeX/LaTeX, as appropriate), and not as images. Tables that include statistical analysis of data should describe their standards of error analysis and ranges in a table legend.

Equations

Include any equations and mathematical expressions in the main text of the paper. Identify equations that are referred to in the text by parenthetical numbers, such as (1), and refer to them in the manuscript as "equation (1)" etc.

For submissions in a .doc or .docx format, please make sure that all equations are provided in an editable Word format. You can produce these with the equation editor included in Microsoft Word.

General figure guidelines

You are responsible for obtaining permission to publish any figures or illustrations that are protected by copyright, including figures published elsewhere and pictures taken by professional photographers. We cannot publish images downloaded from the internet without appropriate permission.

You should state the source of any images used. If you or one of your co-authors has drawn the images, please mention this in your acknowledgements. For software, you should state the name, version number and URL.

Number any figures separately with Arabic numerals in the order they occur in the text of the manuscript. Include error bars when appropriate. Include a description of the statistical treatment of error analysis in the figure legend.

Please do not use schemes. You should submit sequences of chemical reactions or experimental procedures as figures, with appropriate captions. You may include in the manuscript a limited number of uncaptioned graphics depicting chemical structures - each labelled with their name, by a defined abbreviation, or by the bold Arabic numeral.

Use a clear, sans-serif typeface (for example, Helvetica) for figure lettering. Use the same typeface in the same font size for all figures in your paper. For Greek letters, use a 'symbols' font. Put all display items on a white background, and avoid excessive boxing, unnecessary colour, spurious decorative effects (such as three-dimensional 'skyscraper' histograms) and highly pixelated computer drawings. Never truncate the vertical axis of histograms to exaggerate small differences. Ensure any labelling is of sufficient size and contrast to be legible, even after appropriate reduction. The thinnest lines in the final figure should be no smaller than one point wide. You will be sent a proof that will include figures.

- Figures divided into parts should be labelled with a lower-case, bold letter (**a**, **b**, **c** and so on) in the same type size as used elsewhere in the figure.
- Lettering in figures should be in lower-case type, with only the first letter of each label capitalised.
- Units should have a single space between the number and the unit, and follow SI nomenclature (for example, ms rather than msec) or the nomenclature common to a particular field.
- Thousands should be separated by commas (1,000).
- Unusual units or abbreviations should be spelled out in full or defined in the legend.
- Scale bars should be used rather than magnification factors, with the length of the bar defined on the bar itself rather than in the legend.

In legends, please use visual cues rather than verbal explanations such as "open red triangles". Avoid unnecessary figures: data presented in small tables or histograms, for instance, can generally be stated briefly in the text instead. Figures should not contain more than one panel unless the parts are logically connected; each panel of a multipart figure should be sized so that the whole figure can be reduced by the same amount and reproduced at the smallest size at which essential details are visible.

Statistical guidelines

If your paper contains statistical testing, it should state the name of the statistical test, the n value for each statistical analysis, the comparisons of interest, a justification for the use of that test (including, for example, a discussion of the normality of the data when the test is appropriate only for normal data), the alpha level for all tests, whether the tests were one-tailed or two-tailed, and the actual P value for each test (not merely "significant" or "P < 0.05").

Please make it clear what statistical test was used to generate every P value. Use of the word "significant" should always be accompanied by a P value; otherwise, use "substantial," "considerable," etc.

Data sets should be summarized with descriptive statistics, which should include the n value for each data set, a clearly labelled measure of center (such as the mean or the median), and a clearly labelled measure of variability (such as standard deviation or range).

Ranges are more appropriate than standard deviations or standard errors for small data sets. Graphs should include clearly labelled error bars. You must state whether a number that follows the \pm sign is a standard error (s.e.m.) or a standard deviation (s.d.).

You must justify the use of a particular test and explain whether the data conforms to the assumptions of the tests. Three errors are particularly common:

- Multiple comparisons: when making multiple statistical comparisons on a single data set, you should explain how you adjusted the alpha level to avoid an inflated Type I error rate, or you should select statistical tests appropriate for multiple groups (such as ANOVA rather than a series of t-tests).
- Normal distribution: many statistical tests require that the data be approximately normally distributed; when using these tests, you should explain how you tested your data for normality. If the data does not meet the assumptions of the test, you should use a non-parametric alternative instead.
- Small sample size: when the sample size is small (less than about 10), you should use tests appropriate to small samples or justify the use of large-sample tests.

Chemical and biological nomenclature and abbreviations

You should identify molecular structures by bold, Arabic numerals assigned in order of presentation in the text. Once identified in the main text or a figure, you may refer to compounds by their name, by a defined abbreviation, or by the bold Arabic numeral (as long as the compound is referred to consistently as one of these three).

When possible, you should refer to chemical compounds and biomolecules using systematic nomenclature, preferably using [IUPAC](#). You should use standard chemical and biological abbreviations. Make sure you define unconventional or specialist abbreviations at their first occurrence in the text.

Gene nomenclature

You should use approved nomenclature for gene symbols, and employ symbols rather than italicised full names (for example Ttn, not titin). Please consult the appropriate nomenclature databases for correct gene names and symbols. A useful resource is [Entrez Gene](#).

You can get approved human gene symbols from HUGO Gene Nomenclature Committee (HGNC), e-mail: hgnc@genenames.org; see also www.genenames.org.

For proposed gene names that are not already approved, please submit the gene symbols to the appropriate nomenclature committees as soon as possible, as these must be deposited and approved before publication of an article.

Avoid listing multiple names of genes (or proteins) separated by a slash, as in 'Oct4/Pou5f1', as this is ambiguous (it could mean a ratio, a complex, alternative names or different subunits). Use one name throughout and include the other at first mention: 'Oct4 (also known as Pou5f1)'.

Characterisation of chemical and biomolecular materials

Scientific Reports is committed to publishing technically sound research. Manuscripts submitted to the journal will be held to rigorous standards with respect to experimental methods and characterisation of new compounds.

You must provide adequate data to support your assignment of identity and purity for each new compound described in your manuscript. You should provide a statement confirming the source, identity and purity of known compounds that are central to the scientific study, even if they are purchased or resynthesised using published methods.

1. Chemical identity

Chemical identity for organic and organometallic compounds should be established through spectroscopic analysis. Standard peak listings (see formatting guidelines below) for ^1H NMR and proton-decoupled ^{13}C NMR should be provided for all new compounds. Other NMR data should be reported (^{31}P NMR, ^{19}F NMR, etc.) when appropriate. For new materials, you should also provide mass spectral data to support molecular weight

identity. High-resolution mass spectral (HRMS) data is preferred. You may report UV or IR spectral data for the identification of characteristic functional groups, when appropriate. You should provide melting-point ranges for crystalline materials. You may report specific rotations for chiral compounds. You should provide references, rather than detailed procedures, for known compounds, unless their protocols represent a departure from or improvement on published methods.

2. Combinational compound libraries

When describing the preparation of combinatorial libraries, you should include standard characterisation data for a diverse panel of library components.

3. Biomolecular identity

For new biopolymeric materials (oligosaccharides, peptides, nucleic acids, etc.), direct structural analysis by NMR spectroscopic methods may not be possible. In these cases, you must provide evidence of identity based on sequence (when appropriate) and mass spectral characterisation.

4. Biological constructs

You should provide sequencing or functional data that validates the identity of their biological constructs (plasmids, fusion proteins, site-directed mutants, etc.) either in the manuscript text or the Methods section, as appropriate.

5. Sample purity

We request evidence of sample purity for each new compound. Methods for purity analysis depend on the compound class. For most organic and organometallic compounds, purity may be demonstrated by high-field ¹H NMR or ¹³C NMR data, although elemental analysis ($\pm 0.4\%$) is encouraged for small molecules. You may use quantitative analytical methods including chromatographic (GC, HPLC, etc.) or electrophoretic analyses to demonstrate purity for small molecules and polymeric materials.

6. Spectral data

Please provide detailed spectral data for new compounds in list form (see below) in the Methods section. Figures containing spectra generally will not be published as a manuscript figure unless the data are directly relevant to the central conclusions of the paper. You are encouraged to include high-quality images of spectral data for key compounds in the Supplementary Information. You should list specific NMR assignments after integration values only if they were unambiguously determined by multidimensional NMR or decoupling experiments. You should provide information about how assignments were made in a general Methods section.

Example format for compound characterisation data. mp: 100-102 °C (lit.^{ref} 99-101 °C); TLC (CHCl₃:MeOH, 98:2 v/v): R_f = 0.23; [α]_D = -21.5 (0.1 M in n-hexane); ¹H NMR (400 MHz, CDCl₃): δ 9.30 (s, 1H), 7.55-7.41 (m, 6H), 5.61 (d, J = 5.5 Hz, 1H), 5.40 (d, J = 5.5 Hz, 1H), 4.93 (m, 1H), 4.20 (q, J = 8.5 Hz, 2H), 2.11 (s, 3H), 1.25 (t, J = 8.5 Hz, 3H); ¹³C NMR (125 MHz, CDCl₃): δ 165.4, 165.0, 140.5, 138.7, 131.5, 129.2, 118.6, 84.2, 75.8, 66.7, 37.9, 20.1; IR (Nujol): 1765 cm⁻¹; UV/Vis: λ_{\max} 267 nm; HRMS (m/z): [M]⁺ calcd. for C₂₀H₁₅C₁₂NO₅, 420.0406; found, 420.0412; analysis (calcd., found for C₂₀H₁₅C₁₂NO₅): C (57.16, 57.22), H (3.60, 3.61), Cl (16.87, 16.88), N (3.33, 3.33), O (19.04, 19.09).

7. Crystallographic data for small molecules

If your manuscript is reporting new three-dimensional structures of small molecules from crystallographic analysis, you should include a .cif file and a structural figure with probability ellipsoids for publication as Supplementary Information. These must have been checked using the IUCR's [CheckCIF](#) routine, and you must include a PDF copy of the output with the submission, together with a justification for any alerts reported. You should submit crystallographic data for small molecules to the [Cambridge Structural Database](#) and the deposition number referenced appropriately in the manuscript. Full access must be provided on publication.

8. Macromolecular structural data

If your manuscript is reporting new structures, it should contain a table summarising structural and refinement statistics. Templates are available for such tables describing [NMR](#) and [X-ray crystallography](#) data. To facilitate assessment of the quality of the structural data, you should submit with the manuscript a stereo image of a portion of the electron density map (for crystallography papers) or of the superimposed lowest energy structures (≥ 10 ; for NMR papers). If the reported structure represents a novel overall fold, you should also provide a stereo image of the entire structure (as a backbone trace).