nature neuroscience

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Manuscript Number:	NN-A56070	# Supplementary Figures:	7
Manuscript Type:	Article	# Supplementary Tables:	2
		# Supplementary Videos:	0

Reporting Checklist for Nature Neuroscience

This checklist is used to ensure good reporting standards and to improve the reproducibility of published results. For more information, please read Reporting Life Sciences Research.

Please note that in the event of publication, it is mandatory that authors include all relevant methodological and statistical information in the manuscript.

Statistics reporting, by figure

- Please specify the following information for each panel reporting quantitative data, and where each item is reported (section, e.g. Results, & paragraph number).
- Each figure legend should ideally contain an exact sample size (n) for each experimental group/condition, where n is an exact number and not a range, a clear definition of how n is defined (for example x cells from x slices from x animals from x litters, collected over x days), a description of the statistical test used, the results of the tests, any descriptive statistics and clearly defined error bars if applicable.
- For any experiments using custom statistics, please indicate the test used and stats obtained for each experiment.
- Each figure legend should include a statement of how many times the experiment shown was replicated in the lab; the details of sample collection should be sufficiently clear so that the replicability of the experiment is obvious to the reader.
- For experiments reported in the text but not in the figures, please use the paragraph number instead of the figure number.

Note: Mean and standard deviation are not appropriate on small samples, and plotting independent data points is usually more informative. When technical replicates are reported, error and significance measures reflect the experimental variability and not the variability of the biological process; it is misleading not to state this clearly.

		TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
	FIGURE NUMBER	WHICH TEST?	SECTION & PARAGRAPH #	EXACT VALUE	DEFINED?	SECTION & PARAGRAPH #	REPORTED?	SECTION & PARAGRAPH #	EXACT VALUE	SECTION & PARAGRAPH #	VALUE	SECTION & PARAGRAPH #
example	1a	one-way ANOVA	Fig. legend	9, 9, 10, 15	mice from at least 3 litters/group	Methods para 8	error bars are mean +/- SEM	Fig. legend	p = 0.044	Fig. legend	F(3, 36) = 2.97	Fig. legend
example	results, para 6	unpaired t-test	Results para 6	15	slices from 10 mice	Results para 6	error bars are mean +/- SEM	Results para 6	p = 0.0006	Results para 6	t(28) = 2.808	Results para 6

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	TEST USED		n			DESCRIPTIVE STATS (AVERAGE, VARIANCE)		P VALUE		DEGREES OF FREEDOM & F/t/z/R/ETC VALUE	
	FIGURE NUMBER	WHICH TEST?	SECTION & PARAGRAPH #	EXACT VALUE	DEFINED?	SECTION & PARAGRAPH #	REPORTED?	SECTION & PARAGRAPH #	EXACT VALUE	SECTION & PARAGRAPH #	VALUE	SECTION & PARAGRAPH #
+ -	1o,p	Mann-Whitney U-test	Fig. legend; table S1	19,23,28, 35	NMJs from from 5 animals	table S1	mean ± SEM	Figure legend; table S1	1o: p=0.0002; 1p: p=0.0337	table S1; Figure legend	1o: U=69.00 1p: U=336.0	-
+ -	S1c	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	13,11,12	NMJs from 4 animals	table S1	mean ± SEM	Figure legend; table S1	p=0.2883	table S1; Figure legend	F(2,33)=1.29	-
+ -	S1d	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	13,11,12	NMJs from 4 animals	table S1	mean ± SEM	Figure legend; table S1	p=0.0108	table S1; Figure legend	F(2,33)=5.207	-
+ -	S1e, 3c	ANOVA test, followed by a Turkey's multiple comparison test for S1e and Mann-Whitney U-test for 3c	table S1; figure legend	13,11,12	NMJs from 4 animals	table S1	mean ± SEM	Figure legend; table S1	S1e: p=0.2105; for 3c: p=0.1495	table S1; Figure legend	S1e: F(2,33)=1.63 3c: U=51.00	-
+ -	S1f	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	13,11,12	NMJs from 4 animals	table S1	mean ± SEM	Figure legend; table S1	p=0.0278	table S1; Figure legend	F(2,33)=4.00	-
+ -	S1i, 3d	ANOVA test, followed by a Turkey's multiple comparison test for S1i and Mann-Whitney U-test for 3d	table S1; figure legend	13,11,15	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	S1i:p<0.0001; 3d: p=0.0002	table S1; Figure legend	S1i: F(2,36)=15.13 3d: U=9.00	-
+ -	S1j	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	13,11,15	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	p<0.0001	table S1; Figure legend	F(2,36)=42.93	-

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+ -	S3d	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	14,15,15, 13	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	p<0.0001	table S1; Figure legend	F(3,53)=31.96	-
+ -	S3e, 3g	ANOVA test, followed by a Turkey's multiple comparison test for S3e and Mann-Whitney U-test for 3g	table S1; figure legend	14,15,15, 13	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	S3e: p<0.0001; 3g: p<0.0001	table S1; Figure legend	S3e: F(3,53)=30.07 3g: U=0.00	-
+ -	S3f	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	14,15,15, 13	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	p<0.0001	table S1; Figure legend	F(3,53)=63.28	-
+ -	S3j; 3h	ANOVA test, followed by a Turkey's multiple comparison test for S3j and Mann-Whitney U-test for 3h	table S1; figure legend	12,11,13, 10	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	S3j: p=0.3491; 3h: p=0.339	table S1;Figure legend	S3j: F(3,42)=1.127 3h: U=45.00	-
+ -	Fig. 4j; 7a, b	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1; figure	mean ± SEM	Figure legend; table S1	7b: p < 0.0001; 0.75 mM Ca2+: p<0.0001; 1.5 mM Ca2+: p<0.0001; 3 mM Ca2+: p<0.0001; 6 mM Ca2+: p<0.0001; 10 mM Ca2+: p<0.0001	table S1; Figure legend	4j: t(22)=10.37 7b: 0.75: t(22)=4.961 3: t(22)=16.05 6: t(22)=15.89 10: t(22)=12.54	-
+ -	4c	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1; figure	mean ± SEM	Figure legend; table S1	p=0.0260	table S1; Figure legend	t(22)=2.388	-
+ -	S4c	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1; figure	mean ± SEM	Figure legend; table S1	p=0.0162	table S1; Figure legend	t(22)=2.605	-
+ -	S4a	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1; figure	mean ± SEM	Figure legend; table S1	p=0.1333	table S1; Figure legend	t(22)=1.559	-
+ -	4m, n; S4g,h	t- test	table S1; figure legend	12,11	NMJs from 6, 6 animals	table S1; figure	mean ± SEM	Figure legend; table S1	4m: p=0.0004; 4n: p=0.043; S4g: p=0.1914; S4h: p=0.2546	table S1; Figure legend	4m: t(21)=4.248 4n: t(21)=2.154 S4g:t(21)=1.350 S4h:t(21)=1.171	-

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+ -	4f, g; S4e,f	t- test (4f,g) or Mann-Whitney U-test for S4e,f	table S1; figure legend	14,7	NMJs from 10, 5 animals	table S1; figure	mean ± SEM	Figure legend; table S1	4f: p=0.6425 4g: p=0.1783 S4e:p=0.7652 S4f:p=0.0480	table S1; Figure legend	4f: t(19)=0.4717 4g: t(19)=1.398 S4e:U=44.5 S4f:U=22.00	-
+ -	4k, S4d	Mann-Whitney U-test	table S1; figure legend	12,9	NMJs from 12, 9 animals	table S1; figure	mean ± SEM	Figure legend; table S1	4k: p=0.003; S4d: p=0.2136	table S1; Figure legend	4k: U=13.50 S4d: U=36	-
+ -	4d, S4b	t- test	table S1; figure legend	12,11	NMJs from 12, 11 animals	table S1; figure	mean ± SEM	Figure legend; table S1	4d: p=0.7671; S4b: p=0.2413	table S1; Figure legend	4d: t(21)=0.2998; S4b: t(21)=1.206	-
+ -	7e	t- test	table S1; figure legend	12,10	NMJs from 12,10 animals	table S1	mean ± SEM	Figure legend; table S1	1.5 mM Ca2+: p=0.0001; 3 mM Ca2+: p<0.0001; 6 mM Ca2+: p<0.0001; 10 mM Ca2+: p=0.0002	table S1; Figure legend	1.5: t(20)=4.579 3: t(20)=5.028 6: t(20)=6.222 10: t(20)=4.534	-
+ -	S5h	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1	mean ± SEM	Figure legend; table S1	0.75 mM Ca2+: p=0.1971; 1.5 mM Ca2+: p=0.1678; 3 mM Ca2+: p=0.4740; 6 mM Ca2+: p=0.3726; 10 mM Ca2+: p=0.2602	table S1; Figure legend	0.75: t(22)=1.330 1.5: t(22)=1.426 3: t(22)=0.7284 6: t(22)=0.9102 10: t(22)=1.156	-
+ -	7c; S5a	Mann-Whitney U-test	table S1; figure legend	12,10	NMJs from 12, 10 animals	table S1	mean ± SEM	Figure legend; table S1	0.75 mM Ca2+: p=0.0092; 1.5 mM Ca2+: p<0.0001; 3 mM Ca2+: p=0.0005; 6 mM Ca2+: p=0.0272; 10 mM Ca2+: p=0.0062	table S1; Figure legend	0.75: U=20.00 1.5: U=0.00 3: U=7.00 6: U=26.00 10: U=18.00	-
+ -	S5d	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1	mean ± SEM	Figure legend; table S1	0.75 mM Ca2+: p=0.1971; 1.5 mM Ca2+: p=0.2652; 3 mM Ca2+: p=0.9269; 6 mM Ca2+: p=0.5181; 10 mM Ca2+: p=0.6284	table S1; Figure legend	0.75: t(22)=1.330 1.5: t(22)=1.143 3: t(22)=0.09278 6: t(22)=0.6569 10: t(22)=0.4908	-
+ -	S5b,c	Mann-Whitney U-test	table S1; figure legend	12,10	NMJs from 12, 10 animals	table S1; figure	mean ± SEM	Figure legend; table S1	S5b: p=0.0004; S5c: p=0.6682	table S1; Figure legend	S5b: U=6.00 S5c: U=53.00	-
+ -	S5e, f	t- test	table S1; figure legend	12,12	NMJs from 12, 12 animals	table S1; figure	mean ± SEM	Figure legend; table S1	S5e: p=0.9566; S5f: p=0.1574	table S1; Figure legend	S5e: t(22)=0.05502 S5f: t(22)=1.464	-

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+ -	7g; S5i	t- test	table S1; figure legend	7g: 10,10	NMJs from 10, 10 (7g) animals	table S1	mean ± SEM	Figure legend; table S1	3 min: p=0.0004; 6 min: p=0.0115; 9 min: 0.025; 12 min: p=0.0063	table S1; Figure legend	3min: t(18)=4.387 6min: t(18)=2.812 9min: t(18)=2.446 12min: t(18)=3.090	-
+ -	S5j, k	t- test	table S1; figure legend	10,10	NMJs from 10, 10 animals	table S1; figure	mean ± SEM	Figure legend; table S1	S5j: p=0.0012; S5k: p=0.0160	table S1; Figure legend	S5j: t(18)=3.835 S5k: t(18)=2.6508	-
+ -	S5m, n, o	t- test	table S1; figure legend	15,14,14, 14	NMJs from 9, 9, 10, 8 animals	table S1; figure	mean ± SEM	Figure legend; table S1	S5m: p<0.0001; S5n: p=0.0004; S5o: p=0.3040	table S1; Figure legend	S5m: t(27)=12.59 S5n: t(26)=4.095 S5o: t(26)=1.049	-
+ -	6g,h,i	Mann-Whitney U-test	figure legend	11,16	AZs from 5, 2 animals	figure	mean ± SEM	Figure legend	6g: p=0.0015; 6i: p=0.0035; 6h: p=0.7275	Figure legend	6g: U=22.00 6i: U=169.5 6h: U=80.5	-
+ -	S6b,d	Mann-Whitney U-test	table S1; figure legend	9,12,8,8	NMJs from 3 animals	table S1; figure	mean ± SEM	Figure legend; table S1	S6b: p=0.0001; S6d: p=0.9591	table S1; Figure legend	S6b: U=0; S6d: U=31	-
+ -	S6f,g	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	19,15,21	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	S6f: p <0.0001; S6g: p=0.166	table S1; Figure legend	S6f: F(2;52)=54.12; S6g: F(2;52)=1.855	-
+ -	S3k	ANOVA test, followed by a Turkey's multiple comparison test	table S1; figure legend	12,11,13, 10	NMJs from 5 animals	table S1	mean ± SEM	Figure legend; table S1	p=0.6507	table S1; Figure legend	F(3,42)=0.5408	-
+ -	Pearson's	Mann-Whitney U-test	main text	21,11	NMJs from 6, 4 animals	main text	mean ± SEM	main text	p=0.0124	main text	U=82	
+ -	SV diameter	Mann-Whitney U-test	main text	16,10	NMJs from 5, 2 animals	main text	mean ± SEM	main text	p=0.7102	main text	U=72.5	

Representative figures

1. Are any representative images shown (including Western blots and immunohistochemistry/staining) in the paper?

   If so, what figure(s)?

   Fig. 1c-i; Fig. 2b-g; Fig. 3a,b,e,f,i,j; Fig. 4a,h,e,l; Fig. 5; Fig. 6a,b,d,e; Fig. 7a,d,f; Fig. S1a,b,g,h; Fig. S3a-c,g-i; Fig. S5g,l;

2. For each representative image, is there a clear statement of how many times this experiment was successfully repeated and a discussion of any limitations in repeatability?

   If so, where is this reported (section, paragraph #)?

   Yes, there is a statement included in every figure legend.

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Statistics and general methods

1. Is there a justification of the sample size? If so, how was it justified? Where (section, paragraph #)? Even if no sample size calculation was performed, authors should report why the sample size is adequate to measure their effect size.	Typical sample sizes where chosen in accordance with previous publications and are similar to those generally enmployed in the field. We included a statement in the methods part.
2. Are statistical tests justified as appropriate for every figure? Where (section, paragraph #)?	The statistical tests are explicitly mentioned in each figure legend and in table S1. Statistical tests are chosen appropriate to sample sizes, SEM values or whether two or more groups were compared. .
a. If there is a section summarizing the statistical methods in the methods, is the statistical test for each experiment clearly defined?	Statistical tests for each experiment are specified in every figure legend as well as in table S1. A summary is provided in the methods section.
b. Do the data meet the assumptions of the specific statistical test you chose (e.g. normality for a parametric test)? Where is this described (section, paragraph #)?	Yes, the data meet the assumptions for the specific statistical test we chose.
c. Is there any estimate of variance within each group of data? Is the variance similar between groups that are being statistically compared? Where is this described (section, paragraph #)?	Yes, we checked for variation among different groups within each dataset. The used tests were adjusted when variances differed. We did not mention this in the manuscript but we are prepared to do so if requested.
d. Are tests specified as one- or two-sided?	Tests were specified for one-way ANOVA and two tailed t-tests (see statistics methods section).
e. Are there adjustments for multiple comparisons?	For multiple comparison tests, one-way ANOVA has been used for all of the experiments.
3. To promote transparency, *Nature Neuroscience* has stopped allowing bar graphs to report statistics in the papers it publishes. If you have bar graphs in your paper, please make sure to switch them to dot-plots (with central and dispersion statistics displayed) or to box-and-whisker plots to show data distributions.	All bar plots have been edited accordingly.
4. Are criteria for excluding data points reported? Was this criterion established prior to data collection? Where is this described (section, paragraph #)?	Yes. Cells were excluded if the Hill equation (Fig. 7b, Fig. S4a-c) could not be properly fit to the data (affected only 2 cells in Unc13ANull). This criterion was not established prior to data collection as we did not know that this would happen. This is stated in the methods section for electrophysiology.

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5. Define the method of randomization used to assign subjects (or samples) to the experimental groups and to collect and process data. If no randomization was used, state so. Where does this appear (section, paragraph #)?	HPF images were randomized by changing the genotype name to random numbers. Subsequently the analysis of the HPF images (Fig. 6) was performed by a third person. Otherwise, no randomization was used. However, for immunostainings, all genotypes were prepped in one session, stained in one cup and strictly analyzed in an unbiased manner. For electrophysiological recordings, genotypes were measured in an alternating fashion on the same day and strictly analyzed in an unbiased manner.
6. Is a statement of the extent to which investigator knew the group allocation during the experiment and in assessing outcome included? If no blinding was done, state so. Where (section, paragraph #)?	No randomization was applied. However, all genotypes were prepped in one session, stained in one cup and strictly analyzed in an unbiased manner. For electrophysiological recordings, genotypes were measured in an alternating fashion on the same day and strictly analyzed in an unbiased manner.
7. For experiments in live vertebrates, is a statement of compliance with ethical guidelines/regulations included? Where (section, paragraph #)?	Not applicable
8. Is the species of the animals used reported? Where (section, paragraph #)?	For all experiments, Drosophila melanogaster (fruit flies) were used. This has been clearly mentioned throughout the manuscript starting from the introduction and also in the abstract.
9. Is the strain of the animals (including background strains of KO/ transgenic animals used) reported? Where (section, paragraph #)?	Yes, the fly strains have been clearly reported under the genetics section in material and methods of the manuscript.
10. Is the sex of the animals/subjects used reported? Where (section, paragraph #)?	Yes, the sex of the animals used for different experiments has been explicitly mentioned in material and methods part.
11. Is the age of the animals/subjects reported? Where (section, paragraph #)?	No specific age is mentioned, but all of the larvae analyzed were in late third-instar stage, as mentioned in the methods part.
12. For animals housed in a vivarium, is the light/dark cycle reported? Where (section, paragraph #)?	We did not mention this in the manuscript but all animals were reared in a 12h light/dark cycle for animals housed in a vivarium. We are prepared to mention it in the methods section if requested.
13. For animals housed in a vivarium, is the housing group (i.e. number of animals per cage) reported? Where (section, paragraph #)?	This is not mentioned because it is hard to exactly define the number of flies in each vial, but care was taken that overcrowding did not happen, and that animal numbers were comparable and not systematically different, especially during experiments.
14. For behavioral experiments, is the time of day reported (e.g. light or dark cycle)? Where (section, paragraph #)?	Not applicable

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15. Is the previous history of the animals/subjects (e.g. prior drug administration, surgery, behavioral testing) reported?

    Where (section, paragraph #)?

No, the previous history of the animals/ subjects has not been reported. But animals were kept at 18°C in a 12h light/dark cycle prior to experiments for long-term storage.

    a. If multiple behavioral tests were conducted in the same group of animals, is this reported?

       Where (section, paragraph #)?

Not applicable

16. If any animals/subjects were excluded from analysis, is this reported?

    Where (section, paragraph #)?

No animals/subjects were excluded.

    a. How were the criteria for exclusion defined?

       Where is this described (section, paragraph #)?

Not applicable

    b. Specify reasons for any discrepancy between the number of animals at the beginning and end of the study.

       Where is this described (section, paragraph #)?

Not applicable

Reagents

1. Have antibodies been validated for use in the system under study (assay and species)?

Yes, all antibodies that were specifically created in that study were validated, which is also shown in figure 1. All the other antibodies used for immunohistochemistry have been previously reported.

    a. Is antibody catalog number given?

       Where does this appear (section, paragraph #)?

Catalog numbers are provided in additon to the source companies in the material and method section.

    b. Where were the validation data reported (citation, supplementary information, Antibodypedia)?

       Where does this appear (section, paragraph #)?

The validation of the Unc13A and -B antibodies is reported in figure 1.

2. Cell line identity

    a. Are any cell lines used in this paper listed in the database of commonly misidentified cell lines maintained by ICLAC and NCBI Biosample?

       Where (section, paragraph #)?

Not applicable

    b. If yes, include in the Methods section a scientific justification of their use--indicate here in which section and paragraph the justification can be found.

Not applicable

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c. For each cell line, include in the Methods section a statement that specifies:
- the source of the cell lines
- have the cell lines been authenticated? If so, by which method?
- have the cell lines been tested for mycoplasma contamination?

Where (section, paragraph #)?

Not applicable

Data availability

Provide a Data availability statement in the Methods section under "Data availability", which should include, where applicable:
• Accession codes for deposited data
• Other unique identifiers (such as DOIs and hyperlinks for any other datasets)
• At a minimum, a statement confirming that all relevant data are available from the authors
• Formal citations of datasets that are assigned DOIs
• A statement regarding data available in the manuscript as source data
• A statement regarding data available with restrictions

See our data availability and data citations policy page for more information.

Data deposition in a public repository is mandatory for:

a. Protein, DNA and RNA sequences
b. Macromolecular structures
c. Crystallographic data for small molecules
d. Microarray data

Deposition is strongly recommended for many other datasets for which structured public repositories exist; more details on our data policy are available here. We encourage the provision of other source data in supplementary information or in unstructured repositories such as Figshare and Dryad.

We encourage publication of Data Descriptors (see Scientific Data) to maximize data reuse.

Where is the Data Availability statement provided (section, paragraph #)?

All numbers and p values are available in table S1 as well as in the figure legends. All further relevant data are available from the authors upon request.

Protein sequences of all used Y2H fragments and antibody epitopes are provided in the material and methods section.

Resources and clones used for isoform specific mutants are provided in the material and methods section.

Computer code/software

Any custom algorithm/software that is central to the methods must be supplied by the authors in a usable and readable form for readers at the time of publication. However, referees may ask for this information at any time during the review process.

1. Identify all custom software or scripts that were required to conduct the study and where in the procedures each was used.

All custom written MATLAB scripts used for mathematical modeling will be made accessible by request upon publication or before if required.

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2. If computer code was used to generate results that are central to the paper's conclusions, include a statement in the Methods section under "**Code availability**" to indicate whether and how the code can be accessed. Include version information as necessary and any restrictions on availability.	We included a statement mentioning the availability of our custom-written codes.

Human subjects

1. Which IRB approved the protocol? Where is this stated (section, paragraph #)?	Not applicable
2. Is demographic information on all subjects provided? Where (section, paragraph #)?	Not applicable
3. Is the number of human subjects, their age and sex clearly defined? Where (section, paragraph #)?	Not applicable
4. Are the inclusion and exclusion criteria (if any) clearly specified? Where (section, paragraph #)?	Not applicable
5. How well were the groups matched? Where is this information described (section, paragraph #)?	Not applicable
6. Is a statement included confirming that informed consent was obtained from all subjects? Where (section, paragraph #)?	Not applicable
7. For publication of patient photos, is a statement included confirming that consent to publish was obtained? Where (section, paragraph #)?	Not applicable

fMRI studies

For papers reporting functional imaging (fMRI) results please ensure that these minimal reporting guidelines are met and that all this information is clearly provided in the methods:

1. Were any subjects scanned but then rejected for the analysis after the data was collected?	Not applicable
a. If yes, is the number rejected and reasons for rejection described? Where (section, paragraph #)?	Not applicable

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2. Is the number of blocks, trials or experimental units per session and/or subjects specified? Where (section, paragraph #)?	Not applicable
3. Is the length of each trial and interval between trials specified?	Not applicable
4. Is a blocked, event-related, or mixed design being used? If applicable, please specify the block length or how the event-related or mixed design was optimized.	Not applicable
5. Is the task design clearly described? Where (section, paragraph #)?	Not applicable
6. How was behavioral performance measured?	Not applicable
7. Is an ANOVA or factorial design being used?	Not applicable
8. For data acquisition, is a whole brain scan used? If not, state area of acquisition.	Not applicable
a. How was this region determined?	Not applicable
9. Is the field strength (in Tesla) of the MRI system stated?	Not applicable
a. Is the pulse sequence type (gradient/spin echo, EPI/spiral) stated?	Not applicable
b. Are the field-of-view, matrix size, slice thickness, and TE/TR/flip angle clearly stated?	Not applicable
10. Are the software and specific parameters (model/functions, smoothing kernel size if applicable, etc.) used for data processing and pre-processing clearly stated?	Not applicable
11. Is the coordinate space for the anatomical/functional imaging data clearly defined as subject/native space or standardized stereotaxic space, e.g., original Talairach, MNI305, ICBM152, etc? Where (section, paragraph #)?	Not applicable
12. If there was data normalization/standardization to a specific space template, are the type of transformation (linear vs. nonlinear) used and image types being transformed clearly described? Where (section, paragraph #)?	Not applicable
13. How were anatomical locations determined, e.g., via an automated labeling algorithm (AAL), standardized coordinate database (Talairach daemon), probabilistic atlases, etc.?	Not applicable

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14. Were any additional regressors (behavioral covariates, motion etc) used?	Not applicable
15. Is the contrast construction clearly defined?	Not applicable
16. Is a mixed/random effects or fixed inference used?	Not applicable
a. If fixed effects inference used, is this justified?	Not applicable
17. Were repeated measures used (multiple measurements per subject)?	Not applicable
a. If so, are the method to account for within subject correlation and the assumptions made about variance clearly stated?	Not applicable
18. If the threshold used for inference and visualization in figures varies, is this clearly stated?	Not applicable
19. Are statistical inferences corrected for multiple comparisons?	Not applicable
a. If not, is this labeled as uncorrected?	Not applicable
20. Are the results based on an ROI (region of interest) analysis?	Not applicable
a. If so, is the rationale clearly described?	Not applicable
b. How were the ROI's defined (functional vs anatomical localization)?	Not applicable
21. Is there correction for multiple comparisons within each voxel?	Not applicable
22. For cluster-wise significance, is the cluster-defining threshold and the corrected significance level defined?	Not applicable

Additional comments

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