

Reporting Summary

Nature Portfolio 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 Portfolio policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

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
☐	☒ The exact sample size (<i>n</i>) for each experimental group/condition, given as a discrete number and unit of measurement
☐	☒ A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
☐	☒ The statistical test(s) used AND whether they are one- or two-sided <i>Only common tests should be described solely by name; describe more complex techniques in the Methods section.</i>
☐	☒ A description of all covariates tested
☐	☒ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
☐	☒ 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. <i>F</i> , <i>t</i> , <i>r</i>) with confidence intervals, effect sizes, degrees of freedom and <i>P</i> value noted <i>Give P values as exact values whenever suitable.</i>
☒	☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
☒	☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
☒	☐ Estimates of effect sizes (e.g. Cohen's <i>d</i> , Pearson's <i>r</i>), 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	Electrophysiological data was collected using pClamp (molecular devices) Imaging data was collected using Leica software Behavioural data was collected using Blood analyses were collected using a microplate reader
Data analysis	Statistical analyses were carried out using GraphPad prism Behavioural data was analysed using Matlab, Excel (microsoft) Electrophysiological data was analysed using pClamp (molecular devices) Imaging data was analysed using Fiji (ImageJ) & IMARIS

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 and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

The datasets that support the findings of this study are available from the corresponding author upon request

Research involving human participants, their data, or biological material

Policy information about studies with [human participants or human data](#). See also policy information about [sex, gender \(identity/presentation\), and sexual orientation](#) and [race, ethnicity and racism](#).

Reporting on sex and gender

n/a

Reporting on race, ethnicity, or other socially relevant groupings

n/a

Population characteristics

n/a

Recruitment

n/a

Ethics oversight

n/a

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☒ Life sciences ☐ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/documents/nr-reporting-summary-flat.pdf](https://www.nature.com/documents/nr-reporting-summary-flat.pdf)

Life sciences study design

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

Sample size

Samples sizes were decided based on previously published literature in the field. In all conditions our cohort sizes were maximised to enable analysis of group effects (e.g. Naive versus Stress) as well as sex-specific effects within each group (e.g. Impact of stress on Female V Male mice).

Data exclusions

No data was excluded from analyses.

Replication

We ensured that mice were taken from multiple litters (minimum 3 per experimental condition) in order to minimise litter effects, particularly in early-life stress conditions. In this way, we are ensuring that our effects replicable across multiple litters.

Randomization

No randomization was carried out.

Blinding

Experimenters were blinded from groups for analysis of EPSC data.

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
- ☐ ☒ Antibodies
- ☒ ☐ Eukaryotic cell lines
- ☒ ☐ Palaeontology and archaeology
- ☐ ☒ Animals and other organisms
- ☒ ☐ Clinical data
- ☒ ☐ Dual use research of concern
- ☒ ☐ Plants

- n/a
- ☒ Involved in the study
- ☒ ☐ ChIP-seq
- ☒ ☐ Flow cytometry
- ☒ ☐ MRI-based neuroimaging

Antibodies

Antibodies used

PRIMARY ANTIBODIES

[Rabbit] anti-S100 β (1:1000, Abcam, ab52642)
 [Mouse] anti-glucocorticoid receptor (1:500, ThermoFisher, MA1-510)
 [Chicken] anti-GFAP (1:1000, ThermoFisher, PA1-10004)
 [mouse] anti-Cx43 (1:1000 ThermoFisher, 3D8A5)
 [mouse] anti-orexin-A (1:1000, NovusBio, 403 MAB763)
 [rabbit] anti-eGFP (1:500, ThermoFisher, G1362)
 [mouse] anti-NeuN (1:250, Novus. Bio, NBP1-77686)
 [rabbit] anti-Glutamine Synthetase (1:500, Abcam, ab73593)
 [rabbit] anti-Cre (1:500, Synaptic Systems, 257 003)

SECONDARY ANTIBODIES

[goat] anti-rabbit Alexa 488 (1:1000, Jackson Immuno Research, 111-545-144)
 [goat] anti-mouse Alexa 647 (1:1000, ThermoFisher, A32728)
 [goat] anti-chicken Alexa 568 (1:1000, ThermoFisher, A11041)

Validation

We only used antibodies that had been previously validated in the literature.

Animals and other research organisms

Policy information about [studies involving animals](#): [ARRIVE guidelines](#) recommended for reporting animal research, and [Sex and Gender in Research](#)

Laboratory animals

Only mice were used in this study and were originally sourced from Jackson labs.
 C56BL6J from Jackson labs - Jax #000664
 NR3C1-flox mice from Jackson labs - Jax # 021021

Wild animals

n/a

Reporting on sex

Sex is the primary focus of this manuscript with sex differences reported throughout. As such reporting on sex as a biological variable is clear throughout.

Field-collected samples

n/a

Ethics oversight

All experiments were performed in accordance with the guidelines for maintenance and care of animals of the Canadian Council on Animal Care (CCAC) and approved by the Institutional Committee for the Protection of Animals (CIPA) at the Centre Hospitalier de l'Université de Montréal. Protocol number CM20031CMRs

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Plants

Seed stocks

n/a

Novel plant genotypes

n/a

Authentication

n/a