



DATA REPORTING BADGE

<https://www.researchsquare.com/article/SAMPLE>

BADGE RESULTS

SAMPLE DESCRIPTION

- ✓ Sample sizes are provided as a precise value, not a range, and the unit of study is clearly defined.
- ✓ It is clear whether replicates represent biological or technical replicates. If technical replicates are used, no statistical measures are performed unless the use of technical replicates is clearly justified.
- ✓ No error bars or statistical tests are used for sample sizes of $n < 3$.

REPRESENTATIVE DATA

- ✓ Where representative data (e.g., micrographs, blots, representative data plots) are shown, the text indicates the number of experimental repeats performed where similar results were obtained.

ASSUMPTIONS

- ✓ The methods demonstrate that the data conformed to the assumptions of the statistical test used to analyze them. For instance, when using a parametric test (e.g. t test), the manuscript demonstrates that the data are normally distributed.

STATISTICAL TESTS AND DATA

- ✓ The statistical tests used for analysis are described.
- ✓ The description of directional statistical tests indicates whether the tests were one-sided or two-sided.
- ✓ The text describes adjustments made for multiple comparisons (e.g. Bonferroni, Benjamini-Hochberg).
- ✓ P values are provided as a precise value whenever possible. Non-significant results are reported as precise p values not NS or "not significant".
- ✓ Where indicators of statistical significance (e.g., '*') are used, the text defines the meaning of each indicator.
- ✓ The text describes how effect sizes (e.g., Cohen's d, Pearson's r) are calculated.

DESCRIPTIVE STATISTICS AND ERROR INDICATORS

- ✓ The error bars (and/or shading) and measure of center used to describe the data are defined.
- ✓ The measure of center (e.g. mean, median) and error/variability (e.g. SEM, SD) are defined for values shown in the tables.
- ✓ All plots indicating data distribution (e.g., box plots, violin plots) define the plot elements, including minima, maxima, center, and percentiles.