REQUIRED FILES

_X_ PDF of the revised manuscript that includes a preface of point-by-point responses to reviewer comments.

_X_ Text document (formatted as Word or RTF) of the revised manuscript (do not include point-by-point responses).

_NA_ PDF of the uncropped/unedited versions of all gel and blot images that appear in the manuscript and Supplement. Each image should be annotated as "Full unedited gel for Figure X"; highlight which lanes of the unedited gel correspond to those shown in the cropped images within the figures.

_X_ Conflict of interest documentation for all authors and appropriate flow diagrams and checklists as required for the Clinical Medicine category (https://www.jci.org/kiosks/submission-first#Clinical-medicine

_X_ Provide high-resolution electronic files for all figures. See figure instructions for more information: https://www.jci.org/kiosks/publish/figures

_X_ Provide any supplemental material referenced in the manuscript as (a) (if applicable) a PDF highlighting reviewer-requested changes; and (b) a clean, publication-quality PDF. Other acceptable formats are spreadsheets and videos.

RECOMMENDED

_NA_ A graphical abstract -- a single schematic image that visually represents the primary findings of an article, allowing readers to easily identify the article's main message -- is strongly encouraged for all revised manuscripts. For details, see: https://www.jci.org/kiosks/publish/graphical

DATA REPORTING GUIDELINES

_X_ The exact number of samples (n) for each figure panel representing multiple experiments is included in the legend.

_X_ For representative experiments, the number of times the experiment was conducted is stated.

_X_ The statistical test utilized is described in each figure legend.

_NA_ Error bars are defined, either in Statistics or in the legends themselves; e.g., "Data represent mean ± SEM." Variance around the mean and statistical analysis should not be presented if fewer than 3 independent samples are included.

_NA_ For statistical analysis, the analysis appropriately corrects for multiple comparisons when comparing more than two groups and corrects for repeated measures when comparing multiple measurements within subjects. A statement describing inclusion/exclusion criteria is included if samples were excluded from the analysis.

_X_ Graphs of quantitative data must be presented in a manner that clearly shows the distribution of data and variation. Graphs should be presented as dot plots, with the average and appropriate error bars indicated; or as box and whisker plots, with values defined in the legend (the bounds of the boxes, the lines within the boxes, the whiskers, and any outlying values). Presenting data as columns with error bars (dynamite plunger plots) is not permitted.

_NA_ If lanes in a gel or blot image of any kind are spliced together into a composite image, they must be separated by a thin vertical dividing line, and a note must be included in the legend that the lanes were run on the same gel but were noncontiguous. A black dividing line should be used for images with a grey background; a white dividing line should be used for images with a black background.

_NA_ Histological panels and insets: scale bars included in the images are defined in the figure legends, or original magnification is provided in the figure legends.

_NA_ For animal models, the precise genotype, strain, number of backcrosses, sex, and age of animals studied are reported.

_X_ A description of antibodies utilized is included in Methods, including the source and catalog/clone number for commercial antibodies or a description/reference to a description of the generation of custom antibodies.

_X_ The source of cell lines utilized is indicated.

_NA_ Large datasets for gene expression microarrays, SNP arrays, and high-throughput sequencing studies are deposited in a public repository. The accession number is provided in the text of the main manuscript. Deposition of other types of large datasets in a public repository is strongly encouraged.

_X_ Demographic information adheres to NIH guidelines (https://grants.nih.gov/grants/guide/notice-files/not-od-15-089.html) or other applicable authoritative standards on reporting race and ethnicity. Clear, unbiased, and up-to-date descriptors are used for any demographic identities Inclusive data are provided for any demographic variable If any information is unavailable or incomplete, an explanation is provided. Specify whether the participants or investigators made the classifications; and whether the options were defined by the investigators or participants.

MANUSCRIPT FORMATTING (required components)

_X_ Title: The title should be clear, concise, and limited to 15 words, including conjunctions. The relevant disease or disease model studied should be included. Do not use subtitles, colons, periods, or nonstandard abbreviations.

_X_ Authors: full names of all authors are provided in the appropriate order.

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MANUSCRIPT TEXT AND REFERENCES

_X_ Text is organized in the following consecutive sections: Abstract, Introduction, Results, Discussion, Methods, Author contributions, Acknowledgments, References, Figure legends, Tables. The recommended text length is 9000 words; text cannot exceed 12000 words, including figure legends, tables, and references.

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_X_ A section at the end of Methods titled "Statistics" summarizes methods of statistical analysis, including the P value that was considered significant.

_X_ A brief paragraph following the statistics section titled "Study approval" provides, as appropriate, statements indicating approval of animal and/or human studies, with the official name and location of the relevant review board(s) specified; for human studies, a statement indicating receipt of written informed consent from participants or their guardians is included. For manuscripts that include patient photographs, a separate statement must be included that written informed consent was provided for pictures appearing in the manuscript.

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_NA_ Terms such as in vivo, in vitro, etc., are not italicized.

FIGURES, LEGENDS AND TABLES

_X_ Figure parts are labeled with capital letters: A, B, C, etc. Subparts within figures (e.g., Figure 1B cannot have parts I and II) are not permitted.

_X_ Figure legends do not exceed 300 words.

_X_ Usage of terms within the figure legends is consistent with that in the figures themselves; the use of abbreviations is consistent throughout the figures and legends.

_NA_ Tables are included with the submitted Word document and presented in Microsoft Word's table format (i.e., not pasted as an image from another application).

_NA_ Column headings in tables apply to all values throughout the column; a new row of column headings may not be used midway through a table.