



Life Science Alliance

Caspase-1 cleaves Bid to release mitochondrial SMAC and drive secondary necrosis in absence of GSDMD

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Scientific Editor: Andrea Leibfried

Transaction Report:

(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. The original formatting of letters and referee reports may not be reflected in this compilation.)

Please note that the manuscript was previously reviewed at another journal and the reports were taken into account in the decision-making process at Life Science Alliance. Since the original reviews are not subject to Life Science Alliance's transparent review process policy, the reports and author response cannot be published.

April 8, 2020

Re: Life Science Alliance manuscript #LSA-2020-00735-T

Prof. Petr Broz
University of Lausanne
Biochemistry
Chemin des Boveresses
Epalinges 1066
Switzerland

Dear Dr. Broz,

Thank you for transferring your manuscript entitled "Caspase-1 drives rapid secondary necrosis by inducing mitochondrial damage and SMAC release via truncation of Bid" to Life Science Alliance. The manuscript was assessed by expert reviewers at another journal before, and the editors transferred those reports to us with your permission.

The reviewers who evaluated your study elsewhere would have expected a further reaching conceptual advance and *in vivo* experiments in light of the recent related literature. We think that the value provided to others without such additional insight is significant, and would therefore like to publish your work here. You already provided a point-by-point response to the concerns raised by the reviewers, and I have now carefully evaluated your response. I think your response addresses the concerns in a good way, and I would thus like to ask you to upload a revised version of your manuscript, including the following changes:

Please adapt the adapt the model in figure 6 as proposed.

Please expand the Material and Methods as proposed.

Please expand the discussion to better describe the differences of your study from the one from Tsuchiya et al. (using the arguments you provide to rev#2, point 5 and 7). Please also include the additional data as proposed and discuss carefully.

Please expand the discussion on how your results could be translated into physiological settings (using the arguments you provide to rev#2, point 8).

Please mention the partial effects of the pan-caspase inhibitor on caspase-1 activity in the manuscript text.

Please change the manuscript text as proposed in response to rev#3, point 5 and minor point 10.

Please rework the scale bars as proposed.

Please reference the study by Jost et al when introducing type I and type II cells.

Because additional data will still get integrated, we will do a careful figure and manuscript check on the next manuscript version only. So I may have to ask you for additional small changes before final acceptance.

To upload the revised version of your manuscript, please log in to your account:

<https://lsa.msubmit.net/cgi-bin/main.plex>

You will be guided to complete the submission of your revised manuscript and to fill in all necessary

information. Please get in touch in case you do not know or remember your login name.

While you are revising your manuscript, please also attend to the below editorial points to help expedite the publication of your manuscript. Please direct any editorial questions to the journal office.

Thank you for this interesting contribution to Life Science Alliance. We are looking forward to receiving your revised manuscript.

Sincerely,

Andrea Leibfried, PhD
Executive Editor
Life Science Alliance
Meyerhofstr. 1
69117 Heidelberg, Germany
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A. THESE ITEMS ARE REQUIRED FOR REVISIONS

- A letter addressing the reviewers' comments point by point.
- An editable version of the final text (.DOC or .DOCX) is needed for copyediting (no PDFs).
- High-resolution figure, supplementary figure and video files uploaded as individual files: See our detailed guidelines for preparing your production-ready images, <http://www.life-science-alliance.org/authors>
- Summary blurb (enter in submission system): A short text summarizing in a single sentence the study (max. 200 characters including spaces). This text is used in conjunction with the titles of papers, hence should be informative and complementary to the title and running title. It should describe the context and significance of the findings for a general readership; it should be written in the present tense and refer to the work in the third person. Author names should not be mentioned.

B. MANUSCRIPT ORGANIZATION AND FORMATTING:

Full guidelines are available on our Instructions for Authors page, <http://www.life-science-alliance.org/authors>

We encourage our authors to provide original source data, particularly uncropped/-processed electrophoretic blots and spreadsheets for the main figures of the manuscript. If you would like to add source data, we would welcome one PDF/Excel-file per figure for this information. These files will be linked online as supplementary "Source Data" files.

*****IMPORTANT:** It is Life Science Alliance policy that if requested, original data images must be made available. Failure to provide original images upon request will result in unavoidable delays in

publication. Please ensure that you have access to all original microscopy and blot data images before submitting your revision.***

April 15, 2020

RE: Life Science Alliance Manuscript #LSA-2020-00735-TR

Prof. Petr Broz
University of Lausanne
Biochemistry
Chemin des Boveresses
Epalinges 1066
Switzerland

Dear Dr. Broz,

Thank you for submitting your revised manuscript entitled "Caspase-1 cleaves Bid to release mitochondrial SMAC and drive secondary necrosis in absence of GSDMD". I appreciate the introduced changes and would thus be happy to publish your paper in Life Science Alliance pending final revisions necessary to meet our formatting guidelines:

- Please add a callout in the manuscript text to Fig. S1B, D; S4C,D; S6B-D
- You mention Fig. S3D on page 6, please fix
- Please label the white insets in Fig2D to make it clear to which zoomed images they correspond to; note also that one of the insets in the first image does not match the zoomed one
- Please add scale bars to Fig. S3A&B
- Please provide source data for Fig. S4D
- the MitoTracker zoomed images in some panels in Fig. S6A do not match the indicated boxed region; please fix

If you are planning a press release on your work, please inform us immediately to allow informing our production team and scheduling a release date.

To upload the final version of your manuscript, please log in to your account:

<https://lsa.msubmit.net/cgi-bin/main.plex>

You will be guided to complete the submission of your revised manuscript and to fill in all necessary information. Please get in touch in case you do not know or remember your login name.

To avoid unnecessary delays in the acceptance and publication of your paper, please read the following information carefully.

A. FINAL FILES:

These items are required for acceptance.

-- An editable version of the final text (.DOC or .DOCX) is needed for copyediting (no PDFs).

-- High-resolution figure, supplementary figure and video files uploaded as individual files: See our detailed guidelines for preparing your production-ready images, <http://www.life-science->

alliance.org/authors

-- Summary blurb (enter in submission system): A short text summarizing in a single sentence the study (max. 200 characters including spaces). This text is used in conjunction with the titles of papers, hence should be informative and complementary to the title. It should describe the context and significance of the findings for a general readership; it should be written in the present tense and refer to the work in the third person. Author names should not be mentioned.

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We encourage our authors to provide original source data, particularly uncropped/-processed electrophoretic blots and spreadsheets for the main figures of the manuscript. If you would like to add source data, we would welcome one PDF/Excel-file per figure for this information. These files will be linked online as supplementary "Source Data" files.

****Submission of a paper that does not conform to Life Science Alliance guidelines will delay the acceptance of your manuscript.****

****It is Life Science Alliance policy that if requested, original data images must be made available to the editors. Failure to provide original images upon request will result in unavoidable delays in publication. Please ensure that you have access to all original data images prior to final submission.****

****The license to publish form must be signed before your manuscript can be sent to production. A link to the electronic license to publish form will be sent to the corresponding author only. Please take a moment to check your funder requirements.****

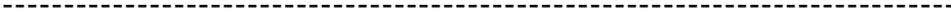
****Reviews, decision letters, and point-by-point responses associated with peer-review at Life Science Alliance will be published online, alongside the manuscript. If you do want to opt out of having the reviewer reports and your point-by-point responses displayed, please let us know immediately.****

Thank you for your attention to these final processing requirements. Please revise and format the manuscript and upload materials within 7 days.

Thank you for this interesting contribution, we look forward to publishing your paper in Life Science Alliance.

Sincerely,

Andrea Leibfried, PhD
Executive Editor
Life Science Alliance
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Dear Dr. Leibfried

Please find enclosed the **revised version** our manuscript entitled "**Caspase-1 cleaves Bid to release mitochondrial SMAC and drive secondary necrosis in absence of GSDMD**" that we would like you to consider for publication in *Life Science Alliance*.

We have changed the manuscript according to your email and unloaded the new files. To address your request we have done the following:

- Please add a callout in the manuscript text to Fig. S1B, D; S4C,D; S6B-D

We have corrected the callouts

- You mention Fig. S3D on page 6, please fix

This has been fixed

- Please label the white insets in Fig2D to make it clear to which zoomed images they correspond to; note also that one of the insets in the first image does not match the zoomed one

corrected

- Please add scale bars to Fig. S3A&B

Scale bars were added

- Please provide source data for Fig. S4D

We have replaced the blots with new blots showing all data and added a .pdf with the full, uncropped blots for this panel

- the MitoTracker zoomed images in some panels in Fig. S6A do not match the indicated boxed region; please fix

corrected

April 16, 2020

RE: Life Science Alliance Manuscript #LSA-2020-00735-TRR

Prof. Petr Broz
University of Lausanne
Biochemistry
Chemin des Boveresses
Epalinges 1066
Switzerland

Dear Dr. Broz,

Thank you for submitting your Research Article entitled "Caspase-1 cleaves Bid to release mitochondrial SMAC and drive secondary necrosis in absence of GSDMD". It is a pleasure to let you know that your manuscript is now accepted for publication in Life Science Alliance. Congratulations on this interesting work.

The final published version of your manuscript will be deposited by us to PubMed Central upon online publication.

Your manuscript will now progress through copyediting and proofing. It is journal policy that authors provide original data upon request.

Reviews, decision letters, and point-by-point responses associated with peer-review at Life Science Alliance will be published online, alongside the manuscript. If you do want to opt out of having the reviewer reports and your point-by-point responses displayed, please let us know immediately.

*****IMPORTANT:** If you will be unreachable at any time, please provide us with the email address of an alternate author. Failure to respond to routine queries may lead to unavoidable delays in publication.***

Scheduling details will be available from our production department. You will receive proofs shortly before the publication date. Only essential corrections can be made at the proof stage so if there are any minor final changes you wish to make to the manuscript, please let the journal office know now.

DISTRIBUTION OF MATERIALS:

Authors are required to distribute freely any materials used in experiments published in Life Science Alliance. Authors are encouraged to deposit materials used in their studies to the appropriate repositories for distribution to researchers.

You can contact the journal office with any questions, contact@life-science-alliance.org

Again, congratulations on a very nice paper. I hope you found the review process to be constructive and are pleased with how the manuscript was handled editorially. We look forward to future exciting submissions from your lab.

Sincerely,

Andrea Leibfried, PhD
Executive Editor
Life Science Alliance
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