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Deficiency of a Terminal ADP-Ribose protein Glycohydrolase TARG1/C6orf130 in neurodegenerative disease

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Editor: Hartmut Vodermaier

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.)

1st Editorial Decision

25 January 2013

Thank you for transferring your manuscript including the original referee comments and tentative response letter to The EMBO Journal. We have now considered the manuscript in detail, also on the basis of the included referee comments and your responses. Our conclusion based on these considerations was that we shall be happy to offer publication of the study once revised along the lines proposed in your letter.

Some of the key points for revising the manuscript will be:

- explaining, discussing and possibly rationalizing the similarities/differences between the new C6orf130 crystal structure and earlier NMR data
- including data on C6orf130 structural requirements for DNA damage site recruitment and on increased H₂O₂ sensitivity of C6orf130-depleted cells; while further epistasis experiments on the exact role in the DNA damage response will not be required at this stage.
- including the data you obtained on whole PAR chain removal by C6orf130
- including the structure data you obtained on a covalent intermediate
- include additional data on C6orf130 expression (as requested by original referee 3), and discussing the possible roles/significance of C6orf130 in relation other recently identified macrodomain proteins with regard to terminal ADP ribose removal

In addition, please adjust the manuscript to EMBO Journal referencing format, and also reorganize

the manuscript exploiting the more extended format of an EMBOJ full-length article with separate introduction, results and discussion sections. It would also be good to move some of the more important supplementary data into the main manuscript, as the article could certainly have up to 8 main figures.

At the stage of resubmission, please include a thorough response letter to the original comments, to help us assess how the concerns have been answered.

I hope you will be able to send us your revised manuscript, using the link provided below, as early as possible. As usual, under EMBO Journal editorial policies any competing manuscripts published while your study is under revision will have no negative impact on our final decision on your work. Should you have any additional questions, please do not hesitate to contact me directly!

Thank you again for the opportunity to consider this work for publication. I look forward to receiving your revision.

1st Revision - authors' response

07 February 2013

Please note that the manuscript was transferred from another journal where it was originally reviewed. As the EMBO Journal's transparent review process policy does not cover this review, the response to these referee comments cannot be published.

Acceptance letter

11 February 2013

Thank you for submitting your revised manuscript for our consideration. We have now assessed the new version as well as your responses to the transferred original referee reports, and I am happy to inform you that we have decided to accept the study for publication in The EMBO Journal at this stage.

Before we will be able to send you a formal letter of acceptance, there is one more remaining editorial issue, the inclusion of the PDB accession codes for the new structures described in this work. Please forward them to us via email at your earliest convenience, and we will introduce them into the manuscript text. After that, we should be able to swiftly proceed with formal acceptance and production of the paper.

Thank you again for this contribution to our journal, and congratulations on a successful publication. Please consider us again for your most exciting work in the future.