

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

ESPS manuscript NO: 18167

Title: The protective role of Recql5 against lipopolysaccharide/D-galactosamine-induced liver injury

Reviewer's code: 00573188

Reviewer's country: Spain

Science editor: Yuan Qi

Date sent for review: 2015-04-09 20:22

Date reviewed: 2015-04-13 16:41

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

COMMENTS TO AUTHORS

Manuscript reference: 18167 Authors: Liao W. et al. Title: The protective role of Recql5 against lipopolysaccharide/D-galactosamine-induced liver injury The authors present a very interesting work, where collected data about the role of a member of the RecQ helicase family in liver injury are shown. For this purpose, they use LPS/D-galactosamine injection into wild type and Recql5-deficient mice and analyzed several parameters to demonstrate effects on survival, oxidative stress, apoptosis, etc. In my opinion, a number of additional measurements of oxidative stress and DNA damage are required to further support the conclusions. Moreover, a more detailed presentation of every section will certainly improve the quality of the manuscript, as well as, a more thoughtful Discussion. Comments: 1- The role of all the authors in the study must be detailed; the contributions of at least two of them are missing. 2- Abstract. The aim sentence should include "the effects of Recql5 helicase deficiency" for readers interested in the subject, but not familiar with the RecQ family function. 3- Core tip. The administration of LPS/D-Gal should state " intraperitoneal injection or i.p." 4- Introduction. Abbreviations for the syndromes, which are used later, should be introduced when first

mentioned. 5- Materials and Methods. The Liver injury induction describes the use of different doses of LPS/D-Gal, but did not state clearly the reason for the use of one or another, neither the length of the treatments. This aspect should be explained for an easier comprehension of the procedures. 6- The method for quantification of the data of TUNEL assays should be explained. How many fields were examined per animal, etc.. 7- qRT-PCR methodology should include whether Trizol extraction is followed by DNase treatment or not. The concentration of the primers used in the assays should be also included, either in the text or in Table 1. Were experimental efficiencies calculated or just assumed to be 2? This aspect should be clarified. 8- Lysis of liver tissues was done by incubation only? 9- TBS plus Tween is normally abbreviated as TTBS. The percentage of dry milk used should be expressed as (w/v). 10- Primary antibodies should be specified together with their source (mouse, rabbit, etc.). Moreover, antibody dilutions used in western blot should be included at least for primary antibodies. 11- How was quantification of western blots performed should be included. Software for densitometric scanning, etc. 12- Results. In general, comparisons are only established between LPS/D-Gal treated wt and Recql5-deficient samples, no mention to control levels (saline treatment) is normally done. 13- Figure 1B shows liver images of wt and Recql5-deficient animals. The later seem to be larger, but no reference to this aspect is made into the text. These images are presented as an example of severe liver hemorrhage, but this is difficult to see. The authors should evaluate the extent of the hemorrhage in another form, such as liver hemoglobin concentration. 14- Figure 2B only shows cleaved caspase-3, in my opinion the image should include both cleaved and uncleaved bands together with their sizes. 15- Cytokines were only examined by qRT-PCR and in my opinion the actual levels of the cytokines should be measured. 16- Western blots of ERK and JNK and their phosphorylation are shown (Figure 3D), and the text states the existence of significant or non-significant differences, depending on the protein examined. However, no quantification of the data is included, and whether the correction is established against GAPDH or between phosphorylated and unphosphorylated proteins is not explained. 16- In my opinion, examination of oxidative stress requires additional measurements including: 1) activities of catalase, NOX and glutathione reductase; and 2) ROS and glutathione levels. 17- Given the role of Recql5 helicase in DNA repair, some insights into DNA damage in

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Title: The protective role of Recql5 against lipopolysaccharide/D-galactosamine-induced liver injury

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CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
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		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

the manuscript is well written and interesting. the authors don't use innovative sperimental thecniques but in a simple manner they are able to underline the manuscript goal.