Reviewer’s report

Title: Membrane protein Nav1.7 contributes to the persistent post-surgical pain regulated by p-p65 in dorsal root ganglion (DRG) of SMIR rats model.

Version: 0 Date: 23 Jul 2017

Reviewer: Martin Kaczocha

Reviewer’s report:

The manuscript by Li et al. provides evidence that NaV1.7 is induced in a model of persistent postsurgical pain and contributes to the pain phenotype. I have several comments that should be addressed prior to publication.

1) To my knowledge, persistent postsurgical pain has been defined as pain persisting for 3 months after surgery. In the manuscript, the authors state that PPP is defined as pain 1 month after surgery. Please clarify.

2) In figure 3, the distribution of NaV1.7 is reported in small and medium diameter neurons as well as in CGRP, NeuN, and IB4 cells, Can the authors comment on whether and how the distribution of NaV1.7 differs between baseline and 10 day post-surgery?

3) The authors should examine whether p-P65 and NaV1.7 co-localize in DRGs. An analysis of the cell-type(s) wherein these proteins co-localize would be valuable.

4) The ChIP assay results show weak band intensities after PCR. Does this reflect low occupancy of the NaV1.7 promoter by P65?

5) The amount of protein loaded appears to differ between the conditions in Figure 4C. The authors should repeat this experiment and provide data with more equivalent loading controls.

6) In the methods, please list the antibody catalog numbers and/or RRIDs.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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