

OPEN PEER REVIEW REPORT 2

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-21-00112

Title: The Homer Signaling under Ischemic and Traumatic Insults in Central Nervous System

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COMMENTS TO AUTHORS

1. The title can't summarize all the contents in this manuscript, because the authors also introduced the retinal disorders except ischemic and traumatic injury. Need to have a better title.
2. In page 2 line 46, the secondary brain damages following ischemic and traumatic injuries are not only brain edema and ischemic injuries, also including epilepsy, cognitive disorder, hydrocephalus, and so on. And are the Homer family members associated with these secondary injuries?
3. In the part of Structural characteristics of Homer (page 3 line 17), can the authors draw a simple structural images of Homers as a figure which includes the common domain, CC domain, Lzip motif, and what's the difference among them? And what's receptors or proteins can be bind to the domains. This would be better to be understood and enrich the review.
4. In the subtitles of The roles of Homer in glutamate receptor signaling (page 4 line 4), The roles of Homer in calcium signaling (page 5 line 5), The roles of Homer in dendritic spine morphogenesis (page 6 line 6), the authors can delete "the roles of", and simplify them as Homer in glutamate receptor signaling, Homer in calcium signaling and Homer in dendritic spine morphogenesis. Same expression in the subtitles (page 7 line 12, page 8 line 4).
5. Before introducing the roles of Homer in glutamate receptor signaling, calcium signaling and dendritic spine morphogenesis, can the authors summarize the importance of glutamate receptor signaling, calcium signaling and dendritic spine morphogenesis in the secondary injuries after ischemic stroke and acute trauma? In this case, the context will be bridge between your topic and the molecular function of Homer.
6. The part of 5 Homer plays an important part in the retinal disorders, this part is not included by ischemic stroke or acute brain trauma, so either the authors delete this part or change another better title.
7. Minor error: page 11 line 23, the last word should be a instead of e.