Review of: "Depolarization block of interneurons"

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Potential competing interests: No potential competing interests to declare.

The paper presents an investigation into the mechanisms of depolarization block in mathematical models of interneurons. The study offers insights into the study of epilepsy and uncontrolled neuronal activity. There are several points that need to be addressed to enhance its overall quality and impact.

1. The authors should clarify why their model applies to hippocampal neurons, whether this model applies to all types of interneurons and brain regions, or whether it is specific to certain types. Providing this information will help readers understand the scope and applicability of the findings.

2. In the article, the author only shows the calculation results, but there is no experiment to prove the reliability of the calculation results. Experimental verification is recommended, such as using methods such as patch clamp. Supplementing these data will provide valuable links between computational results and physiological reality, thereby enhancing the relevance of the research.

3. The author claims to have found surprising results in Fig. 3 and Fig. 4, but there is no experiment to verify, please further supplement the verification experiment to prove that this finding is credible.

4. The last paragraph " Finally, after a certain threshold, the effect is inhibitory again." in the Results section of the article is confusing, please add detailed content to clear up the misunderstanding.

By addressing these specific comments, the authors can further validate their findings, improve the manuscript's impact, and enhance its overall quality. The study's contribution to our understanding of depolarization block in interneurons is commendable, and considering these suggestions will strengthen its significance.