

OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-20-00091

Title: Excitotoxicity-induced endocytosis as a potential target for stroke neuroprotection

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COMMENTS TO AUTHORS

Strengths: This is a well-written article. The author has discussed an interesting mechanism in which TrkB-FL downregulation is minimized by preventing its proteolysis caused by calpain, which is activated in response to excitotoxicity. The author postulated that by blocking this process could induce neuroprotection by enhancing BDNF-regulated neuronal survival pathways. For this purpose, the author has described the use of a TAT-derived cell-permeable peptide, which probably competes with TrkB-interacting protein(s) important for excitotoxicity associated with stroke.

Weakness: The carton may require small changes. The active TFL457 peptide and the control TMy peptide are presented in different colors (dark green versus purple), but with the same shape. When the figure is shrunk, it is difficult to distinguish between these two peptides. It will be better presented with different shapes (rectangular versus circle), in addition to the different colors that are already used.