



PEER-REVIEW REPORT

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-18-00247

Title: Cholinergic receptor, nicotinic, alpha 7 as a target molecule of Arctic mutant amyloid β

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Date sent for review: 2018-04-19

Date reviewed: 2018-04-30

Review time: 11 Days

COMMENTS TO AUTHORS

In the perspective entitled "CHRNA7 as a target molecule of Arctic mutant amyloid β ", the authors focus on the effects of this peptide mutant that blocks the neuroprotective function of the cholinergic nicotinic receptor. The β -Amyloid peptide ($A\beta$) is central to the pathology of Alzheimer's disease, and some of its detrimental actions appear to be elicited through the interaction with different membrane receptors. The authors have shown, in a couple of works, that Arctic $A\beta$, by binding to the CHRNA7, is able to inhibit the neuroprotection brought about by its activation with nicotine, along with the blockade of its signaling pathway. The perspective is well written, it describes the results that support the authors' contention and the conclusion is very reasonable.