

#### **Reviewer 1**

Increasing number of epidemiological studies have shown a strong association between Alzheimer's disease and type 2 diabetes mellitus, in which insulin resistance is a common and critical pathological feature. However, the pathological mechanisms underlying the correlation between insulin resistance and Alzheimer's disease remains unclear. In this study, the authors determine the effects of KAT7 on insulin resistance in Alzheimer's disease. The study is well designed and the results are interesting. A minor revision is required. Comments: 1. The manuscript should be edited. Some minor language polishing should be corrected. 2. Images should be checked and improved. 3. Please update the reference list.

**Response:** Thank you for your kind advice. We have edited the manuscript to improve the language. The images were modified, and references were updated.