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Title: A cAMP analog attenuates beta-amyloid (1–42)-induced mitochondrial dysfunction and spatial learning and memory deficits

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### ACCEPTED MANUSCRIPT

# A cAMP analog attenuates beta-amyloid (1–42)-induced mitochondrial dysfunction and spatial learning and memory deficits

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### Highlight

- Mitochondrial dysfunction contributed to the cognitive impairment and neuronal death.
- Bucladesine inhibited memory and spatial learning impairment.
- Bucladesine prevented the hippocampal mitochondrial dysfunction and oxidative damage.

#### **Abstract**

Alzheimer's disease (AD), a neurodegenerative disorder in elderly, is indicated with deposition of Amyloid  $\beta$  (A $\beta$ ) in the brain and accompanied with cognitive impairment. Bucladesine, a

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