

Investigating the Role of HDAC6 in Protection Against Alzheimer's Disease

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Tau protein is the main component of accumulated waste proteins, often referred to as tangles, responsible for neuronal death in Alzheimer's Disease (AD) patients. As AD progresses, tau becomes modified in a way that ultimately leads to significant cognitive decline. Strong evidence suggests that a deacetylase enzyme can alter tau modification. Therefore, elevation of deacetylase activity could retain tau in an unmodified state, and thus be a potential therapeutic approach against AD. Dozens of kinases were proposed to regulate deacetylase activity and some are known to be impaired in AD. Understanding how these kinases operate may provide alternative strategies for AD intervention.