Wnt signaling involvement in β-amyloid-dependent neurodegeneration

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Abstract

Alzheimer's disease (AD) is a progressive dementia paralleled by selective neuronal death, which is probably caused by the cytotoxic effects of the amyloid-β peptide (Aβ). We have observed that Aβ-dependent neurotoxicity induces a loss of function of Wnt signaling components and that activation of this signaling cascade prevent such cytotoxic effects. Therefore we propose that compounds which mimic this signaling cascade may be candidates for therapeutic intervention in Alzheimer's patients.