

Supplementary Data

Modulation of Amyloid- β Peptide-Induced Toxicity through Inhibition of JNK Nuclear Localization and Caspase-2 Activation

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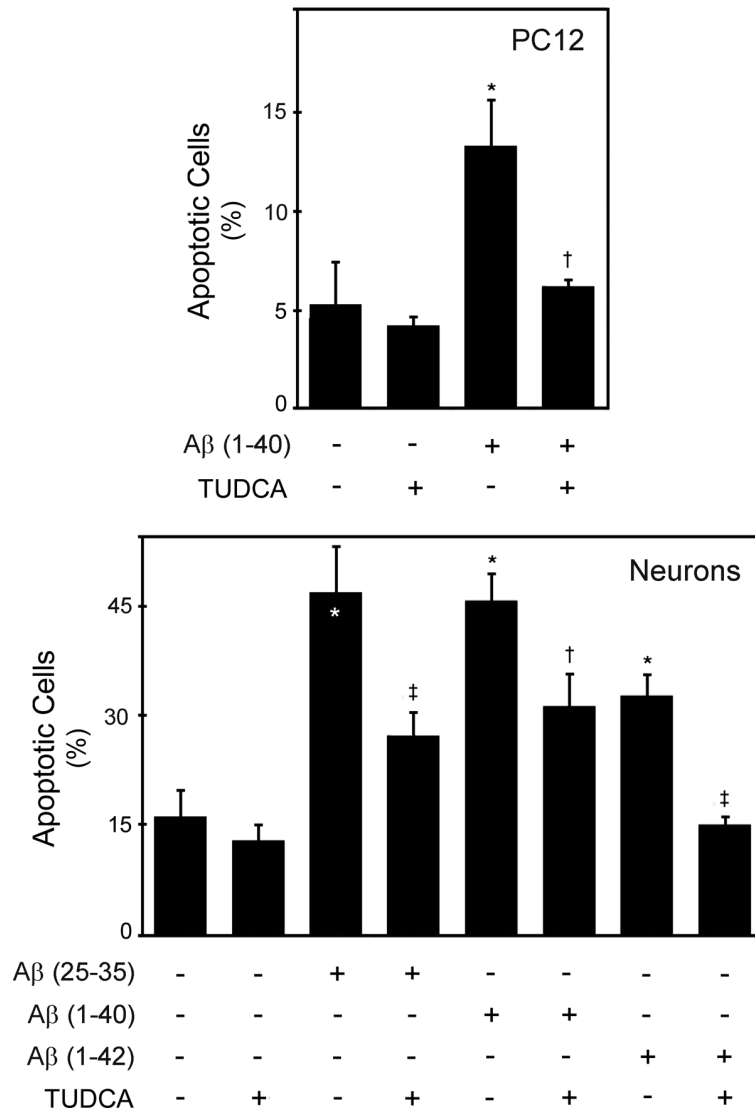
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Supplementary Figure 1. TUDCA inhibits apoptosis induced by A β in PC12 neuronal cells and in primary rat cortical neurons. Cells were incubated with either 25 μ M A β_{25-35} , 10 μ M A β_{1-40} , 20 μ M A β_{1-42} , or no addition (control), $\pm$ 100 μ M TUDCA for 24 h. In co-incubation experiments, TUDCA was added 12 h prior to incubation with A β . Cells were fixed and stained for microscopic assessment of apoptosis after Hoechst staining. Incubation of neuronal-like PC12 cells with 10 μ M A β_{1-40} for 24 h induced apoptosis in almost 15% of cells, while TUDCA significantly prevented A β -induced cell death (*upper panel*). In addition, almost 50% of primary rat cortical neurons were apoptotic after exposure to 25 μ M A β_{25-35} for 24 h, while 10 μ M A β_{1-40} and 20 μ M A β_{1-42} for 24 h resulted in 45 and 30% of apoptotic cells, respectively (*lower panel*). Consistently, TUDCA significantly reduced apoptosis by at least 50%. The results are expressed as mean $\pm$ SEM for at least three different experiments. * p < 0.01 from control; ‡ p < 0.01 and † p < 0.05 from A β alone.