

A β 1-42 mediated Insult in Primary Chicken and Rat Neurons

Compound testing for the following indications:

- Alzheimer's Disease
- Neuroprotection

Model 1: primary E8 chicken telencephalic neurons

Primary E8 chicken telencephalic neurons are cultured until DIV 8 and are then exposed to pre-aggregated A β 1-42 for 48 hours. The effect of test compounds on A β 1-42 induced lesions can be evaluated for viability using the MTT assay, for apoptosis (YO-PRO-1 labelling), or other customized endpoints.

Model 2: primary E18 rat hippocampal neurons

Primary E18 rat hippocampal neurons are matured in vitro until DIV 14 and are then exposed to pre-aggregated A β 1-42 for 48 hours. The effect of test compounds on A β 1-42 mediated lesions can be evaluated for apoptosis (YO-PRO-1 labelling), or other customized endpoints.

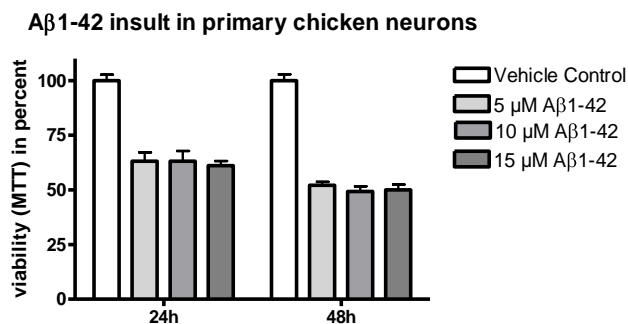


Fig.1. Effect of pre-aggregated A β 1-42 on viability of primary chicken telencephalic neurons. A β 1-42 reduced cell viability assessed after 24h of treatment. This effect was further enhanced after 48h. Cell viability was determined by the MTT assay.

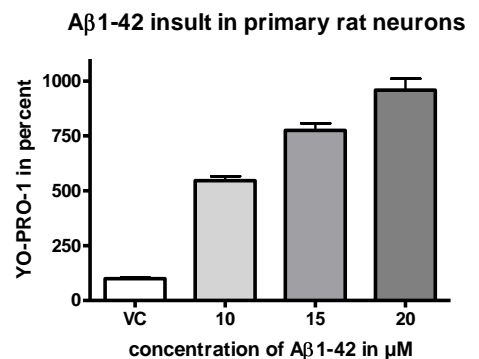


Fig.2 Effect of pre-aggregated A β 1-42 on apoptosis in primary rat hippocampal neurons. A β 1-42 increased apoptosis as evaluated by YO-PRO-1 labelling after 48h of treatment.