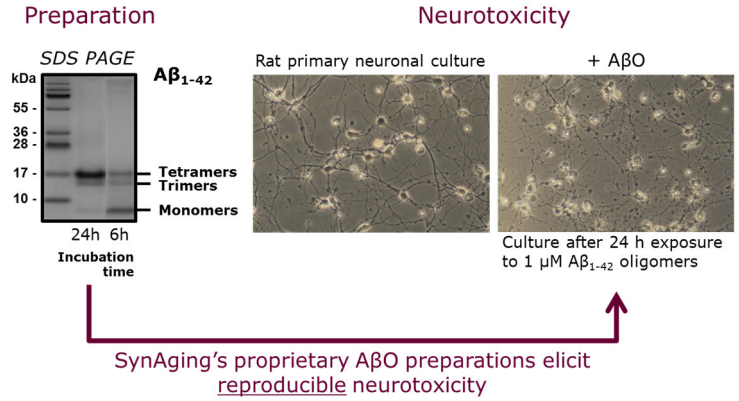
SynAging Product Sheet 1

In vitro Neuroprotection Screen for Alzheimer's Disease

SynAging uses proprietary amyloid-β oligomer (AβO) preparations to model Alzheimer's disease in tissue culture. Neuronal cultures are grown for 14 days and neurodegeneration is induced by 1 µM AβO, resulting in ~50 % cell death within 24h:

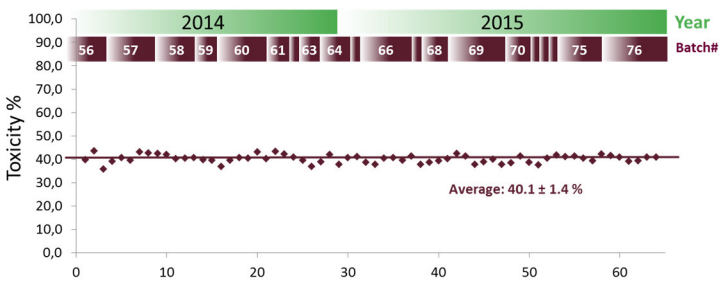


AβO preparations of the following established amyloid peptides are routinely evaluated in our screen:
$Aβ_{1-42}$, $Aβ_{1-40}$, $Aβ_{11-40}$, $Aβ_{11-42}$, $pE(3)Aβ_{3-42}$, $pE(3)Aβ_{3-40}$, $Aβ_{4-40}$, $Aβ_{4-42}$
Others can be evaluated upon request.

The following cultures are available for testing at SynAging:

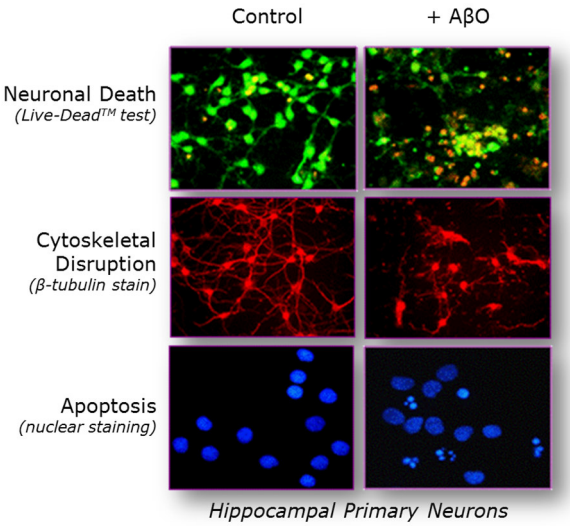
- Hippocampal neurons (rat / mouse)
- Cortical neurons (rat / mouse)
- Striatal neurons (rat / mouse)
- Primary astrocytes (rat / mouse)
- Neuronal and glial cell lines (rat / mouse)

SynAging's model shows very high reproducibility of AβO induced neuronal cell death. Quality control performed over three months using five batches of AβO, resulted in 43.58 ± 0.60 % (mean ± SEM) neuronal cell death.

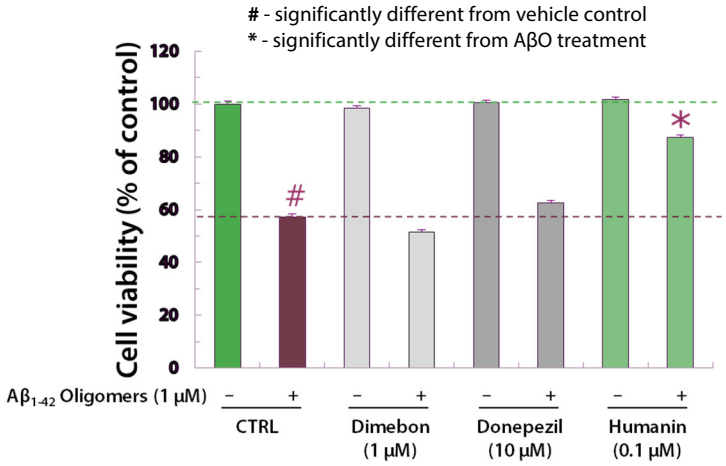


Following AβO and compound treatment, determination of cell viability after 24h, is SynAging's standard approach for evaluating a test compound's neuroprotective efficacy.

Multiple other readouts are well established and regularly performed:



Clinical reference compound testing: neither Dimebon nor Donepezil were able to prevent AβO induced neurodegeneration in SynAging's model. However, the positive control, human anti-apoptotic peptide humanin (Yen, *et al*., 2013, J Mol Endocrinol.; 50(1):R11-9) rescues the model successfully.



SynAging SAS: *Your partner in naturally induced phenotypic models, accelerating drug discovery for proteopathic CNS diseases*

SynAging SAS
24-30 Rue Lionnois
54000 Nancy
France

President:
Violette Koziel
CEO/CSO:
Thierry Pillot

Contact for Europe & USA:
Dr. Andreas Köpke
andreas.kopke@synaging.com
Tel : +49 6136 957 3000

IRET N°: 520 189 838 00011
VAT N°: FR61520189838

Au coeur de la mémoire

www.synaging.com