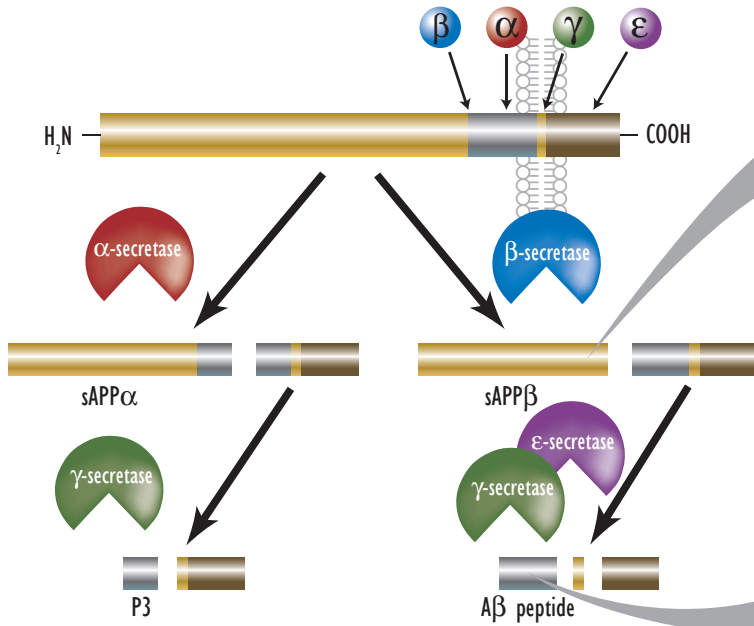


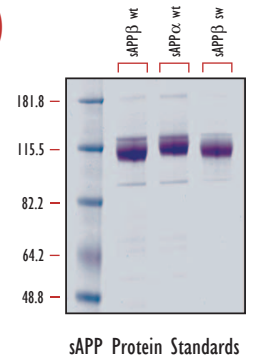
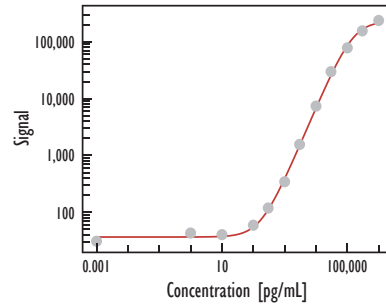
Alzheimer's Disease Research Products from Meso Scale Discovery

MSD offers an array of assay kits to augment Alzheimer's disease (AD) research. We have developed multiplex assays that facilitate rapid quantification of amyloid precursor protein (APP) products in brain homogenates, CSF, serum, and cell culture supernatants. We have also developed assays to detect phosphorylated and total Tau, another target of interest in Alzheimer's disease. Custom multiplex assays can be ordered that combine amyloid peptide, sAPP, and Tau detection. An assay for Beta-secretase (BACE1) activity is available for use in identification of BACE1 inhibitors. Visit www.mesoscale.com for a complete list of Alzheimer's disease product offerings.

Amyloid Precursor Protein (APP) Processing

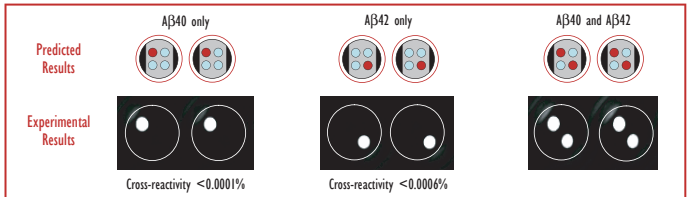
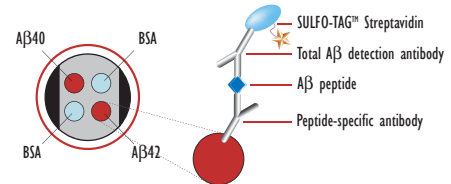


Detection of Human Soluble APP β (sAPP β)



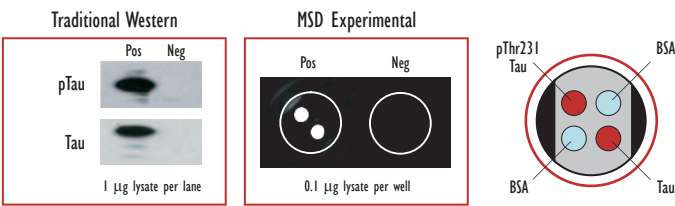
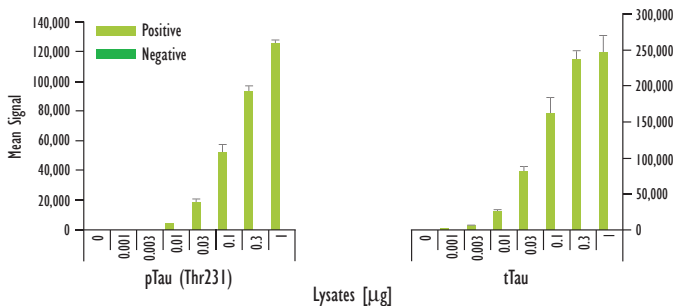
Accurate quantification of various sAPP proteins is obtained through the use of recently developed recombinant sAPPs from a mammalian expression system. Assays detecting sAPP α , sAPP β , and sw sAPP β are available in singleplex and multiplex formats.

Detection of A β Peptides: β -amyloid Peptide Duplex



Cleavage of APP results in the release of sAPP and multiple peptides, including A β 40 and A β 42. A β 42 is a major component of amyloid plaques, the characteristic protein deposits found in the brain of AD patients. MSD offers both N-terminal and internal detection options for A β peptide assays.

Multiplex Tau Assay: Detection of Phosphorylated (pThr231) and Total Tau in the Same Well



Hyperphosphorylation of the microtubule-associated protein tau is a major component of neurofibrillary tangles, a pathological hallmark of AD and other neurodegenerative disorders. MSD's Phospho/Total Tau Assay provides excellent results in whole cell lysates and brain extracts.

Alzheimer's Products

- sAPP α
- sAPP β
- sw sAPP β
- sAPP α/β
- β -Secretase
- Phospho-APP (Thr668)
- Phospho-Tau (Thr231)
- Phospho (Thr231)/Total Tau
- Total Tau
- A β -40 (N-terminal or Internal Detection)
- A β -42 (N-terminal or Internal Detection)
- A β -40/42 (N-terminal or Internal Detection)

For research use only; not for use in diagnostic or therapeutic procedures.

