



Product Information

Amyloid Precursor Protein β , Secreted human, recombinant expressed in *E. coli*

Product Number **S 4316**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

Synonym: sAPP β

Product Description

Secreted amyloid precursor β (sAPP β) is a proteolytic cleavage product of β -amyloid precursor protein (APP). APP is cleaved by β -secretase into two fragments, sAPP β and β -amyloid peptide (A β). The A β is a component of amyloid plaques, one of the major hallmarks of Alzheimer's disease (AD), while the sAPP β is thought to modulate neuronal function and cell survival. Mutation in APP found in Swedish familial AD pedigree increases β -secretase cleavage and the formation of A β and sAPP β . In contrast, activation of protein kinase C (PKC) decreases the levels of sAPP β . The trans-Golgi network (TGN) is the major site for β -secretase activity.

This product is human, recombinant N-terminal histidine tagged sAPP β expressed in *E. coli* as a soluble protein and purified under non-denaturing conditions. It has an apparent molecular weight of ~ 100 kDa (SDS-PAGE).

The product is supplied in a $0.2\text{ }\mu\text{m}$ filtered solution containing 20 mM Tris, pH 7.4, 0.5 M NaCl, 1 mM EDTA, 5 mM 2-mercaptoethanol, and 2 $\mu\text{g/ml}$ aprotinin.

Purity: minimum 85% (SDS-PAGE)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at $-70\text{ }^{\circ}\text{C}$ is recommended. Avoid freeze and thaw cycles. The material should be aliquoted and frozen at $-70\text{ }^{\circ}\text{C}$.

References

1. Skovronsky, D.M. *et al.*, J. Biol. Chem., **275**, 2568-2575 (2000).
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3. Selkoe, D.J., Nature, **399**, A23-31 (1999).
4. Kang, J. *et al.*, Nature, **325**, 733-736 (1987).
5. Haass, C. *et al.*, Nature, **357**, 500-503 (1992).
6. Mattson, M.P., Physiol. Rev., **77**, 1081-1132 (1997).

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