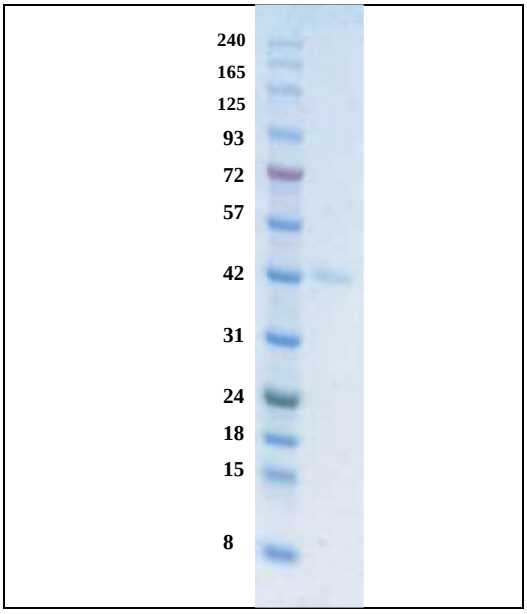
Clonetex Systems Inc.

DATA SHEET

Protein Name: Amyloid Precursor Protein α (304-612), Secreted human (sAPPα 304-612)	**Protein ID:** sAPPα) **Catalog# 104** **Fusion tag(s):** Poly-Histidine tag at N-terminus.
Accession# NP_000475.1 **Molecular Weight:** 39 kDa. **Source:** Homo Sapiens (Human). A synthetic construct encoding the Secreted human (sAPPα from amino acid 304-612) was expressed with an N-terminal poly-histidine tag. **Expression Host:** E. coli **Purity:** 95%. **Supplied in buffer**: 50 mM Tris-HCl [pH 8.0] + 10% Glycerol + 250 mM NaCl and 5 mM β-Mercaptoehtanol.	**Description:** Amyloid β protein (Aβ) is one of the major components of senile plaques in the brain of Alzheimer disease patients and is derived from its precursor Amyloid precursor protein (APP), through the action of β- and γ-secretases (1). The APP is proteolytically processed to generate either the neurotoxic beta-amyloid peptide (Aβ) or the secreted ectodomain APP alpha (sAPPα) (2). Secreted amyloid precursor protein-α (sAPPα) has several functions including the stimulation of neurite outgrowth, memory enhancement (3), however, its level is reduced during the pathogenesis of Alzheimer's disease, 1.Selkoe, D.J. Translating cell biology into therapeutic advances in Alzheimer's disease. *Nature* **399**, A23–A31 (1999). 2. Tackenberg, C., Nitsch, R.M. The secreted APP ectodomain sAPPα, but not sAPPβ, protects neurons against Aβ oligomer-induced dendritic spine loss and increased tau phosphorylation. *Mol Brain* **12,** 27 (2019). 3. Small DH, Nurcombe V, Reed G, Clarris H, Moir R, et al. (1994) A heparin-binding domain in the amyloid protein precursor of Alzheimer's disease is involved in the regulation of neurite outgrowth. J Neurosci 14: 2117–2127.

Coomassie-blue stained SDS-PAGE under reducing conditions.



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