Recombinant A4 protein (His tag)

Catalog Number	539692
Synonyms	APP; ABPP; APPI; Alzheimer disease amyloid A4 protein homolog; Alzheimer disease amyloid protein; Amyloid precursor protein; Amyloid-beta (A4) precursor protein; Amyloid-beta A4 protein; Cerebral vascular amyloid peptide; CVAP; PreA4; Protease nexin-II; PN-II; S-APP-alpha; S-APP-beta; Beta-secretase C-terminal fragment; Beta-CTF; Abeta42; Beta-APP42; Abeta40; Beta-APP40; Alpha-secretase C-terminal fragment; Alpha-CTF; 42; 40; Amyloid intracellular domain 59; AICD-59; AID(59); Gamma-CTF(59); Amyloid intracellular domain 57; AICD-57; AID(57); Gamma-CTF(57); Amyloid intracellular domain 50; AICD-50; AID(50); Gamma-CTF(50)
Species	Human
Expression System	E. coli
Accession	P05067
Molecular Weight	Predictes a molecular mass of 21.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	18-189
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 18-189 aa (P05067) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Amyloid-beta Precursor Protein (APP) Fragment (18-189) is a high-purity protein product encompassing the E1 functional domain, designed for researchers studying neuronal adhesion, neurite growth, and APP-related signaling pathways. This fragment serves as an essential tool for investigating the physiological roles of APP in neuroscience and neurodegenerative disease research. Amyloid-beta precursor protein (APP) is a critical cell surface receptor in human neurons, playing key roles in neurite growth, neuronal adhesion, axonogenesis, and synaptogenesis through interactions between APP molecules on neighboring cells. The full-length protein functions in cell mobility, transcription regulation, and axonal transport, while also coupling to apoptosis-inducing pathways. APP undergoes complex proteolytic processing, generating multiple fragments including amyloid-beta peptides implicated in Alzheimer's disease pathology. The protein localizes primarily to the cell membrane and intracellular vesicles, with specific fragments distributing to various subcellular compartments including the nucleus, endoplasmic reticulum, and early endosomes. The E1 domain contained within this recombinant fragment is fundamental to APP's extracellular functions and interaction capabilities.