

ARG70716 Human BACE1 recombinant protein (His-tagged, C-ter)

Package: 100 µg, 20 µg
Store at: -20°C

Summary

Product Description	CHO expressed, His-tagged (C-ter) BACE1 recombinant protein
Tested Application	SDS-PAGE
Target Name	BACE1
Species	Human
A.A. Sequence	Thr 22 - Thr 457
Expression System	CHO
Alternate Names	Beta-site APP cleaving enzyme 1; BACE; Beta-secretase 1; Membrane-associated aspartic protease 2; HSPC104; Memapsin-2; ASP2; Asp 2; EC 3.4.23.46; Aspartyl protease 2; Beta-site amyloid precursor protein cleaving enzyme 1

Properties

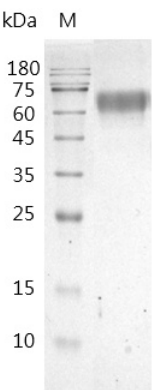
Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 95% by SDS-PAGE gel and HPLC analyses.
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	BACE1
Gene Full Name	beta-site APP-cleaving enzyme 1
Background	Cerebral deposition of amyloid beta peptide is an early and critical feature of Alzheimer's disease. Amyloid beta peptide is generated by proteolytic cleavage of amyloid precursor protein (APP) by two proteases, one of which is the protein encoded by this gene. The encoded protein, a member of the peptidase A1 protein family, is a type I integral membrane glycoprotein and aspartic protease that is found mainly in the Golgi. Multiple transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, May 2011]
Function	Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves at the N-terminus of the A-beta peptide sequence, between residues 671 and 672 of APP, leads to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase. [UniProt]

PTM	N-Glycosylated. Acetylated in the endoplasmic reticulum at Lys-126, Lys-275, Lys-279, Lys-285, Lys-299, Lys-300 and Lys-307. Acetylation by NAT8 and NAT8B is transient and deacetylation probably occurs in the Golgi. Acetylation regulates the maturation, the transport to the plasma membrane, the stability and the expression of the protein. Palmitoylation mediates lipid raft localization. [UniProt]
Cellular Localization	Membrane; Single-pass type I membrane protein. Golgi apparatus, trans-Golgi network. Endoplasmic reticulum. Endosome. Cell surface. Cytoplasmic vesicle membrane. Membrane raft. Note=Predominantly localized to the later Golgi/trans-Golgi network (TGN) and minimally detectable in the early Golgi compartments. A small portion is also found in the endoplasmic reticulum, endosomes and on the cell surface. [UniProt]

Images



ARG70716 Human BACE1 recombinant protein (His-tagged, C-ter)
SDS-PAGE image

SDS-PAGE analysis of ARG70716 Human BACE1 recombinant protein (His-tagged, C-ter).