

BACE-1 active protein

Recombinant BACE-1

CATALOG # AAA48325	HOST Baculovirus	APPLICATIONS SDS-Page
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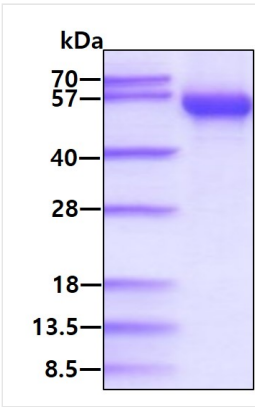
PRODUCT SYNONYMS

BACE-1; Recombinant BACE-1; BACE1; Beta-secretase 1; Aspartyl protease 2; ASP2; Asp 2; Beta-site amyloid precursor protein cleaving enzyme 1; Beta-site APP cleaving enzyme 1; Memapsin-2; Membrane-associated aspartic protease 2; BACE; KIAA1149; HSPC104; BACE-1 active protein

PRODUCT SPECIFICATIONS

Host	Baculovirus
Purity/Purification	> 90% by SDS-PAGE
Form/Format	Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol
Concentration	0.5mg/ml (determined by BCA assay) (varies by lot)
Sequence Positions	22-457aa
Sequence	TQHGIRLPLR SGLGGAPLGL RLPRETDEEP EEPGRRGSFV EMVDNLRGKS GQGYVEMTV GSPPQTLNIL VDTGSSNFAV GAAPHPFLHR YYQRQLSSTY RDLRKGYYVP YTQGWEGEL GTDLVSIPHG PNVTVRANIA AITESDKFFI NGSNWEGILG LAYAEIARPD DSLEPFFDSL VKQTHVPNLF SLQLCGAGFP LNQSEVLASV GGSMIIGGID HSLYTGSLWY TPIRREWYVE VIIVRVEING QDLKMDCKEY NYDKSIVDSG TTNLRLPKKV FEAAVKSIIKA ASSTEKFPDG FWLGEQLVCW QAGTTPWNIF PVISLYLMGE VTNQSFRTI LPQQYLRPVE DVATSQDDCY KFAISQSSTG TVMGAVIMEG FYVVFDRARK RIGFAVSACH VHDEFRTAAV EGPVFTLDME DCGYNIPQTD ESTLMT
Sequence Length	401
Applicable Applications for BACE-1 active protein	Enzyme Activity, SDS-PAGE
Tag	His-Tag
Biological Activity	Specific activity is > 5 pmol/min/ug in which one unit will convert 1.0 pmole of Mca-SEVNLDAEFRK(Dnp)RR-NH ₂ to MCA- Pro-Leu-OH per minute at pH 3.5 at 25C.
Endotoxin	< 1 EU per 1ug of protein (determined by LAL method)
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Can be stored at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE
3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

ADDITIONAL INFORMATION

Related Product Information for BACE-1 active protein	BACE-1, also known as beta-secretase 1 isoform A, is a member of aspartic protease and an integral membrane protein. It is involved in the proteolytic processing of the amyloid precursor protein (APP). This protein cleaves at the N-terminus of the A-beta peptide sequence of APP, and then 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. It has been implicated in the onset and/or progression of Alzheimer's disease. It is also distantly related to the pathogenic aspartic-acid protease plasmepsin, which is a potential target for future anti-malarial drugs. Recombinant human BACE-1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
Product Categories/Family for BACE-1 active protein	Enzymes & Proteases; Neuroscience
References	Andrew RJ., et al. (2013) Proc Natl Acad Sci U S A. 114:E9665-E9674.;; Brendel M., et al. (2018) Theranostics. 8:4957-4968.

NCBI AND UNIPROT INFORMATION

NCBI GI #	333440466
NCBI GeneID	23621
NCBI Accession #	NP_001193977.1
NCBI GenBank Nucleotide #	NP_001193977.1
UniProt Accession #	P56817
Molecular Weight	49.2kDa (442aa)
NCBI Official Full Name	beta-secretase 1 isoform E
NCBI Official Synonym Full Names	beta-secretase 1
NCBI Official Symbol	BACE1
NCBI Official Synonym Symbols	ASP2; BACE; HSPC104
NCBI Protein Information	beta-secretase 1
UniProt Protein Name	Beta-secretase 1
UniProt Gene Name	BACE1
UniProt Synonym Gene Names	BACE; KIAA1149; ASP2; Asp 2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/baculovirus-active-protein/bace-1/48325>