

Product datasheet

Recombinant human BACE1 protein (Active) ab168075

2 Images

Description

Product name	Recombinant human BACE1 protein (Active)
Biological activity	Determined using a β -Secretase Activity Assay Kit. Specific units > 120x10 ³ units/mg. One unit is defined as the amount of enzyme that produces 1 pmol/min EDANS by hydrolyzing the substrate BVT9964 (NH ₂ -Arg-Glu(EDANS)-Glu-Val-Asn-Leu-Asp-Ala-Glu-Phe-Lys(DABCYL)-Arg-COOH) at 37°C in 100 mM acetate buffer pH 4.0.
Purity	> 90 % SDS-PAGE.
Expression system	Insect cells
Accession	P56817
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	47 kDa
Amino acids	46 to 460
Additional sequence information	Mature protease domain.

Specifications

Our [Abpromise guarantee](#) covers the use of **ab168075** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid
Additional notes	Produced using non-baculovirus insect cells.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. Constituents: 50% Glycerol (glycerin, glycerine), PBS
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This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

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.

Tissue specificity

Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coeruleus and medulla oblongata.

Sequence similarities

Belongs to the peptidase A1 family.

Domain

The transmembrane domain is necessary for its activity. It determines its late Golgi localization and access to its substrate, APP.

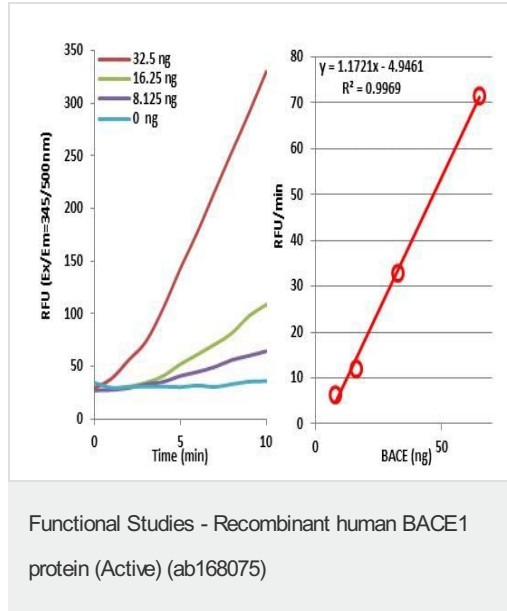
Post-translational modifications

Glycosylated.

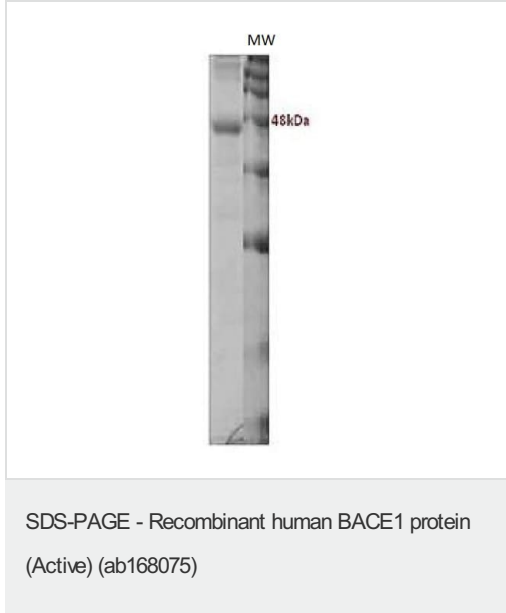
Cellular localization

Membrane. Golgi apparatus > trans-Golgi network. Endoplasmic reticulum. Endosome. Cell surface. 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.

Images



Example of BACE1 Activity Assay.



SDS-PAGE analysis of ab168075.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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