

# **BACE Polyclonal Antibody**

Catalog # AP74289

#### **Product Information**

Application WB Primary Accession P56817

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW55764

### **Additional Information**

**Gene ID** 23621

**Other Names** Beta-secretase 1 (EC 3.4.23.46) (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)

**Dilution** WB~~WB 1:500-2000, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name BACE1 ( HGNC:933)

**Synonyms** BACE, KIAA1149

**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 (PubMed: 10656250, PubMed: 10677483, PubMed: 20354142). Cleaves CHL1 (By similarity).

**Cellular Location** Cell membrane; Single-pass type I membrane protein Golgi apparatus,

trans-Golgi network. Endoplasmic reticulum. Endosome. Cell surface. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P56818}. Lysosome. Late endosome. Early endosome. Recycling endosome. Cell projection, axon

{ECO:0000250|UniProtKB:P56818}. Cell projection, dendrite

{ECO:0000250 | UniProtKB:P56818}. 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 (PubMed:11466313, PubMed:17425515). Colocalization with APP in early endosomes is due to addition of bisecting N-acetylglucosamine which blocks targeting to late endosomes and lysosomes (By similarity) Retrogradly transported from endosomal compartments to the trans-Golgi network in a phosphorylation- and GGA1- dependent manner (PubMed:15886016). {ECO:0000250 | UniProtKB:P56818, ECO:0000269 | PubMed:11466313, ECO:0000269 | PubMed:15886016, ECO:0000269 | PubMed:17425515}

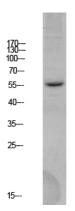
**Tissue Location** 

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

## **Background**

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. Cleaves APP with much more catalytic efficiency than for the wild-type.

## **Images**



Western blot analysis of HEK293 lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

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