

# **BACE Polyclonal Antibody**

**Catalog # AP74289** 

# **Specification**

# **BACE Polyclonal Antibody - Product Information**

Application WB
Primary Accession P56817

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **BACE Polyclonal Antibody - 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

## **BACE Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/10656250" target="\_blank">10656250</a>, PubMed:<a href="http://www.uniprot.org/citations/10677483" target="\_blank">10677483</a>, PubMed:<a href="http://www.uniprot.org/citations/20354142" target="\_blank">20354142</a>). 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**

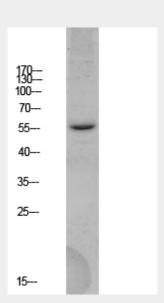
Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coruleus and medulla oblongata.

# **BACE Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **BACE Polyclonal Antibody - Images**



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

# **BACE Polyclonal Antibody - 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.