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BACE1 Antibody
Rabbit mAb
Catalog # AP91310

Specification

BACE1 Antibody - Product Information

Application	**WB, IP**
Primary Accession	P56817
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
Beta-secretase 1; Aspartyl protease 2; ASP2; Asp 2; Memapsin-2; BACE1; BACE;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**55764 Da**

BACE1 Antibody - Additional Information

Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human BACE1**
Description	**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.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

BACE1 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:10656250, PubMed:<a

href="http://www.uniprot.org/citations/10677483" target="_blank">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 wich 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}

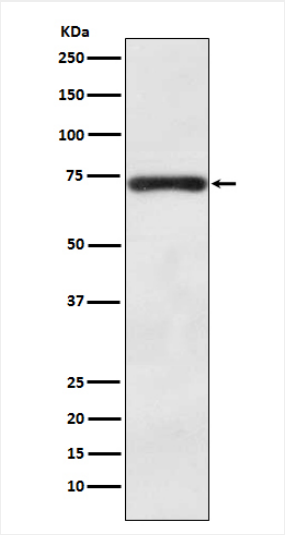
Tissue Location
Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coruleus and medulla oblongata.

BACE1 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

BACE1 Antibody - Images



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Western blot analysis of BACE1 expression in SH-SY5Y cell lysate.