

BACE1 / BACE Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11030**Specification**

BACE1 / BACE Antibody (Internal) - Product Information

Application	IHC-P
Primary Accession	P56817
Reactivity	Human, Mouse, Rabbit, Hamster, Monkey, Pig, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56kDa KDa
Dilution	IHC-P ~ ~ N/A

BACE1 / BACE Antibody (Internal) - Additional Information**Gene ID** 23621**Other Names**

Beta-secretase 1, 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, BACE1, BACE, KIAA1149

Target/Specificity

Human BACE1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

BACE1 / BACE Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

BACE1 / BACE Antibody (Internal) - 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:10677483).

href="http://www.uniprot.org/citations/20354142" target="_blank">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 coeruleus and medulla oblongata.

Volume

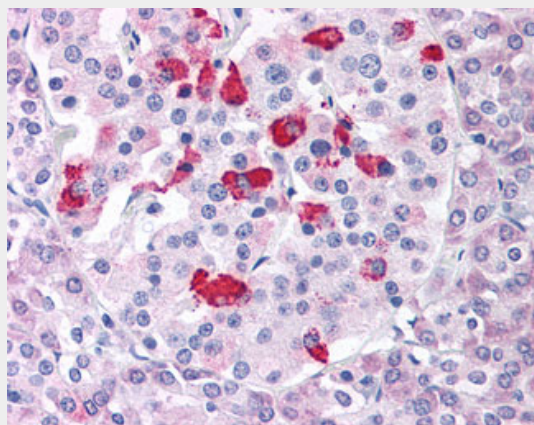
50 µl

BACE1 / BACE Antibody (Internal) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BACE1 / BACE Antibody (Internal) - Images



Anti-BACE1 antibody ALS11030 IHC of human pancreas.

BACE1 / BACE Antibody (Internal) - 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.

BACE1 / BACE Antibody (Internal) - References

Vassar R.,et al.Science 286:735-741(1999).

Sinha S.,et al.Nature 402:537-540(1999).

Yan R.,et al.Nature 402:533-537(1999).

Hussain I.,et al.Mol. Cell. Neurosci. 14:419-427(1999).

Michel B.,et al.Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.