

Anti-BACE1 / BACE Antibody (N-Terminus)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS17370

Product Information

Application	IHC-P
Primary Accession	P56817
Predicted	Human, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55764
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	23621
Alias Symbol	BACE1
Other Names	BACE1, APP beta-secretase, Asp 2, ASP2, Aspartyl protease 2, Aspartylprotease 2, Beta-secretase, Beta-site APP-cleaving enzyme, BACE, HSPC104, KIAA1149, B-Secretase, Beta-secretase 1, Memapsin-2
Target/Specificity	Human BACE1. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except ZBTB47 (44%).
Reconstitution & Storage	PBS, less than 0.1% sodium azide. Aliquot and store undiluted at -20°C or below for up to 1 year. Can be stored undiluted at 4°C for up to 1 month. Avoid freeze thaw cycles.
Precautions	Anti-BACE1 / BACE Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

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 coeruleus and medulla oblongata.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.