



BACE Polyclonal Antibody

Catalog No	YP-Ab-12688
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	BACE1
Protein Name	Beta-secretase 1
Immunogen	The antiserum was produced against synthesized peptide derived from human BACE. AA range:452-501
Specificity	BACE Polyclonal Antibody detects endogenous levels of BACE protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	BACE1; BACE; KIAA1149; Beta-secretase 1; 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
Observed Band	
Cell Pathway	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 . Lysosome . Late endosome . Early endosome . Recycling endosome . Cell projection, axon . Cell projection, dendrite . 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:17425515, PubMed:11466313). Colocalization with APP in early endosomes is due to addition of bisecting N-acetylglucosamine which blocks targeting to late endosomes and lysosomes (By similarity). Retrogradely transported from end
Tissue Specificity	Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coeruleus and medulla oblongata.
Function	catalytic activity:Broad endopeptidase specificity. Cleaves Glu-Val-Asn-Leu-I-Asp-Ala-Glu-Phe in the Swedish variant of Alzheimer's amyloid precursor protein.,enzyme regulation:Inhibited by RTN3 and



RTN4.,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.,similarity:Belongs to the peptidase A1 family.,subunit:Monomer. Interacts with GGA1, GGA2 and GGA3. Interacts with RTN3 and RTN4.,tissue specificity:Brain.,

Background

beta-secretase 1(BACE1) Homo sapiens This gene encodes a member of the peptidase A1 family of aspartic proteases. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protease. This transmembrane protease catalyzes the first step in the formation of amyloid beta peptide from amyloid precursor protein. Amyloid beta peptides are the main constituent of amyloid beta plaques, which accumulate in the brains of human Alzheimer's disease patients. [provided by RefSeq, Nov 2015],

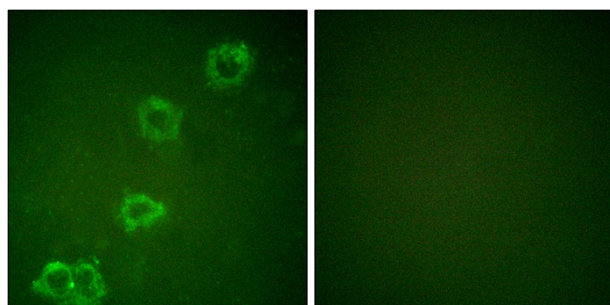
matters needing attention

Avoid repeated freezing and thawing!

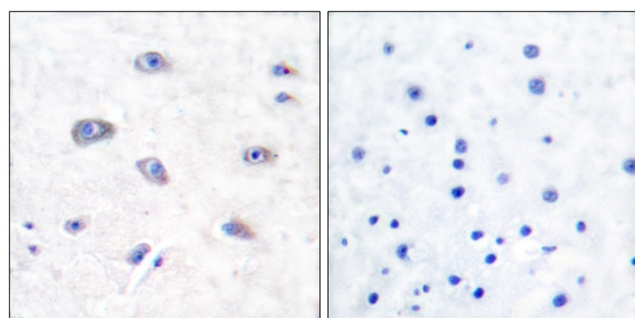
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunofluorescence analysis of HUVEC cells, using BACE Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using BACE Antibody. The picture on the right is blocked with the synthesized peptide.