



BACE Monoclonal Antibody

Catalog No	YP-Ab-12623
Isotype	IgG
Reactivity	Human;Rat;Bovine;Dog;Pig
Applications	WB
Gene Name	BACE1
Protein Name	Beta-secretase 1
Immunogen	Purified recombinant human BACE (C-terminus) protein fragments expressed in E.coli.
Specificity	BACE Monoclonal Antibody detects endogenous levels of BACE protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. 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-Ile-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],

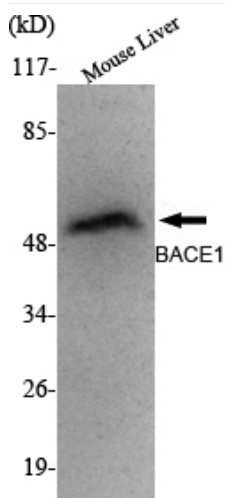
matters needing attention

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



Western Blot analysis using BACE Monoclonal Antibody against mouse liver lysate.