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BACE1 Rabbit mAb

Catalog # AP75137

Product Information

Application	WB, IHC-P, IP
Primary Accession	P56818
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	55748

Additional Information

Gene ID	23821
Other Names	Bace1
Dilution	WB~~1:500-1:1000 IHC-P~~N/A IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	Bace1 {ECO:0000312|MGI:MGI:1346542}
Synonyms	Bace
Function	Responsible for the proteolytic processing of the amyloid precursor protein (APP) (PubMed:29325091). 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:29325091). Cleaves CHL1 (PubMed:29325091).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P56817}; Single-pass type I membrane protein. Golgi apparatus, trans-Golgi network. Endoplasmic reticulum {ECO:0000250|UniProtKB:P56817}. Endosome. Late endosome. Early endosome. Cell surface. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P56817}. Membrane raft. Lysosome Recycling endosome. Cell projection, axon. Cell projection, dendrite.

	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 (By similarity). Colocalization with APP in early endosomes is due to addition of bisecting N-acetylglucosamine which blocks targeting to late endosomes and lysosomes (PubMed:25592972). Retrogradly transported from endosomal compartments to the trans-Golgi network in a phosphorylation- and GGA1-dependent manner (By similarity) {ECO:0000250|UniProtKB:P56817, ECO:0000269|PubMed:25592972}
Tissue Location	Expressed in the brain, specifically in neurons and astrocytes (at protein level).

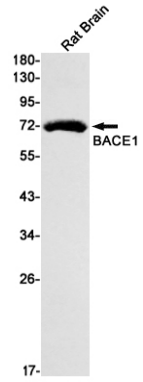
Background

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. Cleaves APP with much more catalytic efficiency than for the wild-type.

Images



Western blot analysis of BACE1 in rat Brain lysates using BACE1 antibody.



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