

**BACE Monoclonal Antibody**

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| <b>Catalog No :</b>          | YM1015  |
| <b>Reactivity :</b>          | Human;Rat;Bovine;Dog;Pig  |
| <b>Applications :</b>        | WB  |
| <b>Target :</b>              | BACE  |
| <b>Fields :</b>              | >>Alzheimer disease   |
| <b>Gene Name :</b>           | BACE1   |
| <b>Protein Name :</b>        | Beta-secretase 1  |
| <b>Human Gene Id :</b>       | 23621   |
| <b>Human Swiss Prot No :</b> | P56817  |
| <b>Mouse Swiss Prot No :</b> | P56818  |
| <b>Rat Gene Id :</b>         | 29392   |
| <b>Rat Swiss Prot No :</b>   | P56819  |
| <b>Immunogen :</b>           | Purified recombinant human BACE (C-terminus) protein fragments expressed in E.coli. |
| <b>Specificity :</b>         | BACE Monoclonal Antibody detects endogenous levels of BACE protein.                 |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.             |
| <b>Source :</b>              | Monoclonal, Mouse   |
| <b>Dilution :</b>            | WB 1:1000 - 1:2000. Not yet tested in other applications.                           |
| <b>Purification :</b>        | Affinity purification   |

**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 56kD

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**Cell Pathway :** Alzheimer's disease;

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**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],

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**Function :** catalytic activity:Broad endopeptidase specificity. Cleaves Glu-Val-Asn-Leu-|-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.,

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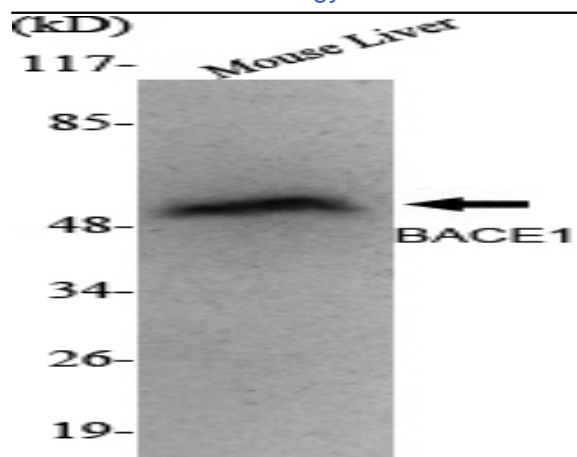
**Subcellular Location :** Cell membrane ; Single-pass type I membrane protein . Golgi apparatus, trans-Golgi network . Endoplasmic reticulum . Endosome . Cell surface . Cytoplasmic vesicle membrane ; Single-pass type I membrane protein . Membrane raft . Lysosome . Late endosome . Early endosome . Recycling 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). Retrogradly transported from end

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**Expression :** Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coeruleus and medulla oblongata.

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## Products Images



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