

# Anti-BACE1/Bace Rabbit Monoclonal Antibody

Catalog # ABO13799

## Product Information

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|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IP                                                                                                                      |
| <b>Primary Accession</b> | <a href="#">P56817</a>                                                                                                      |
| <b>Host</b>              | Rabbit                                                                                                                      |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                  |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                           |
| <b>Clonality</b>         | Monoclonal                                                                                                                  |
| <b>Format</b>            | Liquid                                                                                                                      |
| <b>Description</b>       | Anti-BACE1/Bace Rabbit Monoclonal Antibody . Tested in WB, IP applications.<br>This antibody reacts with Human, Mouse, Rat. |

## Additional Information

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| <b>Gene ID</b>                  | 23621                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Other Names</b>              | Beta-secretase 1, 3.4.23.46, 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, BACE1 ( <a href="#">HGNC:933</a> ), BACE, KIAA1149                                                                                                                                                 |
| <b>Calculated MW</b>            | 55764                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Application Details</b>      | WB 1:500-1:2000<br>IP 1:40                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Subcellular Localization</b> | Membrane; Single-pass type I membrane protein. Golgi apparatus, trans-Golgi network. Endoplasmic reticulum. Endosome. Cell surface. Cytoplasmic vesicle membrane. Membrane raft. 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. |
| <b>Tissue Specificity</b>       | Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coeruleus and medulla oblongata..                                                                                                                                                                                                                                                       |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                                                                                                                                                            |
| <b>Clone Names</b>              | Clone: ABFF-2                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen</b>                | A synthesized peptide derived from human BACE1                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                                                                                                                                                                                                                                                        |

**Storage** Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Protein Information

**Name** BACE1 ( [HGNC:933](#))

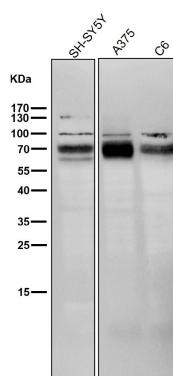
**Synonyms** BACE, KIAA1149

**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}

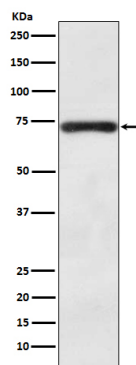
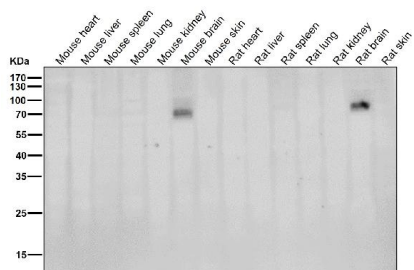
**Tissue Location** Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coeruleus and medulla oblongata.

## Images



All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

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Western blot analysis of BACE1 expression in SH-SY5Y cell lysate.

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