

## Anti-BACE1/Bace Rabbit Monoclonal Antibody

**Catalog # ABO13799** 

## **Specification**

## Anti-BACE1/Bace Rabbit Monoclonal Antibody - Product Information

Application WB, IP
Primary Accession P56817
Host Rabbit Isotype Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-BACE1/Bace Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

## Anti-BACE1/Bace Rabbit Monoclonal Antibody - Additional Information

#### Gene ID 23621

#### **Other Names**

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="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=933" target=" blank">HGNC:933</a>), BACE, KIAA1149

### Calculated MW 55711 MW KDa

## **Application Details**

WB 1:500-1:2000<br>IP 1:40

#### **Subcellular Localization**

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.

### **Tissue Specificity**

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

## **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### **Immunogen**



A synthesized peptide derived from human BACE1

**Purification** 

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.

#### Anti-BACE1/Bace Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/10656250" target="\_blank">10656250</a>, PubMed:<a href="http://www.uniprot.org/citations/10677483" target="\_blank">10677483</a>, PubMed:<a href="http://www.uniprot.org/citations/20354142" target="\_blank">20354142</a>). 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:17425515}

## **Tissue Location**

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

## **Anti-BACE1/Bace Rabbit Monoclonal Antibody - Protocols**

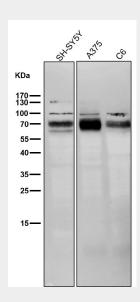
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

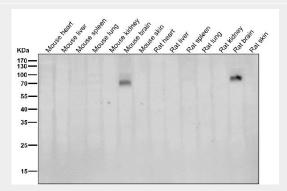


- Immunoprecipitation
- Flow Cytomety
- Cell Culture

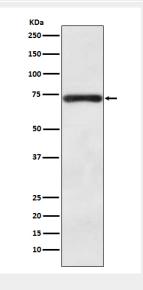
# **Anti-BACE1/Bace Rabbit Monoclonal Antibody - Images**



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



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







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