

### Anti-BACE1 (AcK316) Antibody

Rabbit polyclonal antibody to BACE1 (AcK316) Catalog # AP61373

#### Specification

### Anti-BACE1 (AcK316) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>P56817</u> <u>P56818</u> Human, Mouse, Bovine Rabbit Polyclonal 55764

#### Anti-BACE1 (AcK316) Antibody - Additional Information

Gene ID 23621

**Other Names** 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

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BACE1 (AcK316). The exact sequence is proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### Anti-BACE1 (AcK316) 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:11466313, ECO:0000250|PubMed:15886016, ECO:0000269|PubMed:17425515}

#### **Tissue Location**

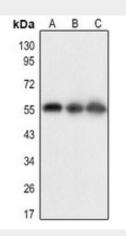
Expressed at high levels in the brain and pancreas. In the brain, expression is highest in the substantia nigra, locus coruleus and medulla oblongata.

## Anti-BACE1 (AcK316) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-BACE1 (AcK316) Antibody - Images



Western blot analysis of BACE1 (AcK316) expression in MCF7 (A), SKOVCAR3 (B), mouse brain (C)



# whole cell lysates.

## Anti-BACE1 (AcK316) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human BACE1 (AcK316). The exact sequence is proprietary.