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BACE2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6121a

Specification

BACE2 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	O9Y5Z0
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**56180**
Antigen Region	**336-365**

BACE2 Antibody (Center) - Additional Information

Gene ID 25825

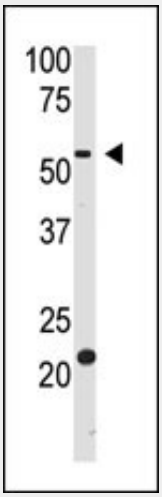
Other Names
Beta-secretase 2, Aspartic-like protease 56 kDa, Aspartyl protease 1, ASP1, Asp 1, Beta-site amyloid precursor protein cleaving enzyme 2, Beta-site APP cleaving enzyme 2, Down region aspartic protease, DRAP, Memapsin-1, Membrane-associated aspartic protease 1, Theta-secretase, BACE2, AEPLC, ALP56, ASP21

Target/Specificity
This BACE2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 336-365 amino acids from the Central region of human BACE2.

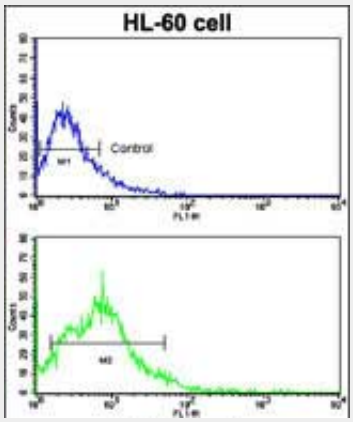
Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw



The anti-BACE2 Ctr Pab (Cat. #AP6121a) is used in Western blot to detect BACE2 in HL60 cell lysate.



Flow cytometric analysis of HL-60 cells using BACE2 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

BACE2 Antibody (Center) - Background

Cerebral deposition of amyloid beta peptide is an early and critical feature of Alzheimer's disease and a frequent complication of Down

cycles.

Precautions
BACE2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

BACE2 Antibody (Center) - Protein Information

Name BACE2

Synonyms AEPLC, ALP56, ASP21

Function
Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves APP, between residues 690 and 691, leading 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. It has also been shown that it can cleave APP between residues 671 and 672. Responsible also for the proteolytic processing of CLTRN in pancreatic beta cells (PubMed:21907142).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Golgi apparatus. Endoplasmic reticulum. Endosome

Tissue Location
Brain. Present in neurons within the hippocampus, frontal cortex and temporal cortex (at protein level). Expressed at low levels in most peripheral tissues and at higher levels in colon, kidney, pancreas, placenta, prostate, stomach and trachea. Expressed at low levels in the brain. Found in spinal cord, medulla oblongata, substantia nigra and locus coruleus. Expressed in the ductal epithelium of both normal and malignant prostate.

BACE2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides

syndrome. Amyloid beta peptide is generated by proteolytic cleavage of amyloid precursor protein by 2 proteases, one of which is the protein encoded by BACE2. This gene localizes to the 'Down critical region' of chromosome 21. The encoded protein, a member of the peptidase A1 protein family, is a type I integral membrane glycoprotein and aspartic protease.

BACE2 Antibody (Center) - References

Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003).
Basi, G., et al., J. Biol. Chem. 278(34):31512-31520 (2003).
Barbiero, L., et al., Exp. Neurol. 182(2):335-345 (2003).
Shi, X.P., et al., J. Biol. Chem. 278(23):21286-21294 (2003).
Kondoh, K., et al., Breast Cancer Res. Treat. 78(1):37-44 (2003).

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture