

BACE2 Antibody (aa44-59)
Rabbit Polyclonal Antibody
Catalog # ALS11546**Specification**

BACE2 Antibody (aa44-59) - Product Information

Application	IHC
Primary Accession	O9Y5Z0
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56kDa KDa

BACE2 Antibody (aa44-59) - Additional Information**Gene ID** 25825**Other Names**

Beta-secretase 2, 3.4.23.45, 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

Amino acids 44 to 59 of human BACE2

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

BACE2 Antibody (aa44-59) is for research use only and not for use in diagnostic or therapeutic procedures.

BACE2 Antibody (aa44-59) - 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 (PubMed: [10591213](http://www.uniprot.org/citations/10591213), PubMed: [11083922](http://www.uniprot.org/citations/11083922), PubMed: [11423558](http://www.uniprot.org/citations/11423558), PubMed: [15857888](http://www.uniprot.org/citations/15857888)).

PubMed:16816112). Involved in the proteolytic shedding of PMEL at early stages of melanosome biogenesis. Cleaves PMEL within the M-beta fragment to release the amyloidogenic PMEL luminal fragment containing M-alpha and a small portion of M-beta N-terminus. This is a prerequisite step for subsequent processing and assembly of PMEL fibrils into amyloid sheets (PubMed:23754390). 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 Melanosome. Note=Colocalizes with PMEL in stage I and II melanosomes.

Tissue Location

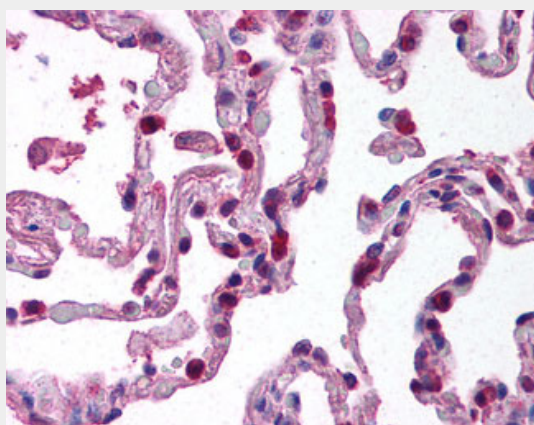
Brain. Present in neurons within the hippocampus, frontal cortex and temporal cortex (at protein level). Expressed at low levels in most peripheral tissues and at higher levels in colon, kidney, pancreas, placenta, prostate, stomach and trachea. Expressed at low levels in the brain. Found in spinal cord,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

BACE2 Antibody (aa44-59) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BACE2 Antibody (aa44-59) - Images



Anti-BACE2 antibody IHC of human lung.

BACE2 Antibody (aa44-59) - Background

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.

BACE2 Antibody (aa44-59) - References

Yan R.,et al.Nature 402:533-537(1999).
Xin H.,et al.Biochim. Biophys. Acta 1501:125-137(2000).
Solans A.,et al.Cytogenet. Cell Genet. 89:177-184(2000).
Acquati F.,et al.FEBS Lett. 468:59-64(2000).
Bennett B.D.,et al.J. Biol. Chem. 275:20647-20651(2000).