

Anti-APH1a Picoband Antibody
Catalog # ABO12111**Specification**

Anti-APH1a Picoband Antibody - Product Information

Application	WB
Primary Accession	Q96BI3
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Gamma-secretase subunit APH-1A(APH1A) detection. Tested with WB in Human;Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-APH1a Picoband Antibody - Additional Information

Gene ID 51107

Other Names

Gamma-secretase subunit APH-1A, APH-1a, Aph-1alpha, Presenilin-stabilization factor, APH1A, PSF

Calculated MW

28996 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus, Golgi stack membrane; Multi- pass membrane protein. Predominantly located in the endoplasmic reticulum and in the cis-Golgi.

Tissue Specificity

Widely expressed. Expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, skeletal muscle, heart and brain. Isoform 1 and isoform 2 are nearly expressed at the same level. .

Protein Name

Gamma-secretase subunit APH-1A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human APH1a (236-265aa

LRSIQRSLLCRRQEDSRVMVYSALRIPPED), different from the related mouse sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the APH-1 family.

Anti-APH1a Picoband Antibody - Protein Information

Name APH1A

Synonyms PSF

Function

Non-catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid- beta precursor protein) (PubMed: [12297508](http://www.uniprot.org/citations/12297508), PubMed: [12522139](http://www.uniprot.org/citations/12522139), PubMed: [12679784](http://www.uniprot.org/citations/12679784), PubMed: [12763021](http://www.uniprot.org/citations/12763021), PubMed: [25043039](http://www.uniprot.org/citations/25043039), PubMed: [26280335](http://www.uniprot.org/citations/26280335), PubMed: [30598546](http://www.uniprot.org/citations/30598546), PubMed: [30630874](http://www.uniprot.org/citations/30630874)). Required for normal gamma-secretase assembly (PubMed: [12471034](http://www.uniprot.org/citations/12471034), PubMed: [12522139](http://www.uniprot.org/citations/12522139), PubMed: [12763021](http://www.uniprot.org/citations/12763021), PubMed: [19369254](http://www.uniprot.org/citations/19369254)). The gamma-secretase complex plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels (Probable).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus, Golgi stack membrane; Multi-pass membrane protein. Note=Predominantly located in the endoplasmic reticulum and in the cis-Golgi

Tissue Location

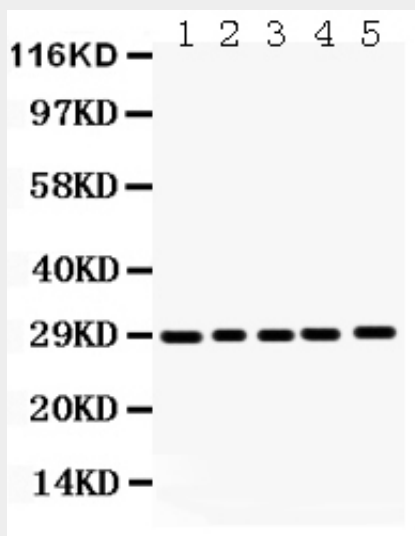
Widely expressed. Expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, skeletal muscle, heart and brain. Isoform 1 and isoform 2 are nearly expressed at the same level.

Anti-APH1a Picoband 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 Cytometry](#)
- [Cell Culture](#)

Anti-APH1a Picoband Antibody - Images



Anti- APH1a Picoband antibody, ABO12111, Western blotting All lanes: Anti APH1a (ABO12111) at 0.5ug/ml
Lane 1: Mouse Lung Tissue Lysate at 50ug
Lane 2: Mouse Liver Tissue Lysate at 50ug
Lane 3: SW620 Whole Cell Lysate at 40ug
Lane 4: SMMC Whole Cell Lysate at 40ug
Lane 5: Human Placenta Tissue Lysate at 50ug
Predicted bind size: 29KD
Observed bind size: 29KD

Anti-APH1a Picoband Antibody - Background

APH1a encodes a component of the gamma secretase complex that cleaves integral membrane proteins such as Notch receptors and beta-amyloid precursor protein. The gamma secretase complex contains this gene product, or the paralogous anterior pharynx defective 1 homolog B (APH1B), along with the presenilin, nicastrin, and presenilin enhancer-2 proteins. The precise function of this seven-transmembrane-domain protein is unknown though it is suspected of facilitating the association of nicastrin and presenilin in the gamma secretase complex as well as interacting with substrates of the gamma secretase complex prior to their proteolytic processing. Polymorphisms in a promoter region of this gene have been associated with an increased risk for developing sporadic Alzheimer's disease. Alternative splicing results in multiple protein-coding and non-protein-coding transcript variants.