

APH1a Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58139

Specification

APH1a Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession <u>Q96BI3</u>

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
30 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human APH1a

Epitope Specificity 71-170/265

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Endoplasmic reticulum membrane.

SIMILARITY Belongs to the APH-1 family.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

APH1a is an essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral proteins such as Notch receptors and APP (beta-amyloid precursor protein). It probably represents a stabilizing cofactor for the presentin homodimer that promotes the formation of a stable complex. Belongs to the APH-1 family.

APH1a Polyclonal Antibody - Additional Information

Gene ID 51107

Other Names

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

Target/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.

Dilution

WB~~1:1000<br \><span class</pre>

="dilution_IHC-P">IHC-P~~N/A<br \><span class

="dilution_IHC-F">IHC-F~~N/A<br \><span class



="dilution IF">IF \sim 1:50 \sim 200
span class ="dilution E">E \sim N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

APH1a Polyclonal 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, PubMed:12522139, PubMed:12679784, PubMed:12763021, PubMed:25043039, PubMed:26280335, PubMed:30598546, PubMed:30630874). Required for normal gamma-secretase assembly (PubMed:12471034, PubMed:12522139, PubMed:12763021, PubMed: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.

APH1a Polyclonal Antibody - Protocols

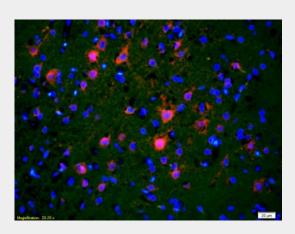
Provided below are standard protocols that you may find useful for product applications.

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



• Cell Culture

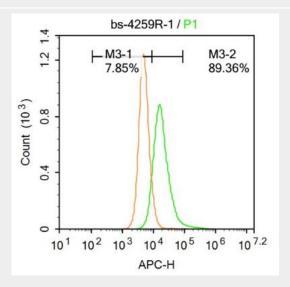
APH1a Polyclonal Antibody - Images



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-APH1a Polyclonal Antibody, Unconjugated(bs-4259R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control: A431.

Primary Antibody (green line): Rabbit Anti-APH1a antibody (bs-4259R)

Dilution: $1 \mu g / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1 µg /test.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.