APH1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6302A

Specification

APH1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q96BI3
Other Accession	Q8BVF7
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**28996**
Antigen Region	**77-109**

APH1 Antibody (N-term) - Additional Information

Gene ID 51107

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

Target/Specificity
This APH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 77-109 amino acids from the N-terminal region of human APH1.

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

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 cycles.

Precautions
APH1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

APH1 Antibody (N-term) - 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.

APH1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

APH1 Antibody (N-term) - Images
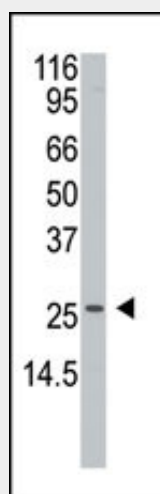
Western blot analysis of anti-APH1 Antibody (N-term) (Cat. #AP6302a) in A2058 cell line lysates

(35ug/lane). APH1 (arrow) was detected using the purified Pab.
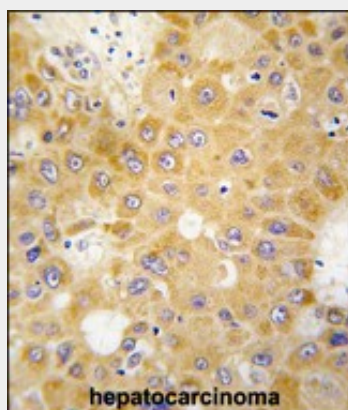
hepatocarcinoma

Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with APH1 antibody (N-term) (Cat.#AP6302a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

APH1 Antibody (N-term) - Background

APH1 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). The gamma-secretase complex is minimally composed of a presenilin homodimer (PSEN1 or PSEN2), nicastrin (NCSTN), APH1 (APH1A or APH1B) and PEN2, although other components may exist. APH1 probably represents a stabilizing cofactor for the presenilin homodimer that promotes the formation of a stable complex.

APH1 Antibody (N-term) - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).
Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003).
Marlow, L., et al., Biochem. Biophys. Res. Commun. 305(3):502-509 (2003).
Kimberly, W.T., et al., Proc. Natl. Acad. Sci. U.S.A. 100(11):6382-6387 (2003).
Edbauer, D., et al., Nat. Cell Biol. 5(5):486-488 (2003).