10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-APH1A Antibody

Peptide-affinity purified goat antibody

Catalog # AF1072a

Specification

Goat Anti-APH1A Antibody - Product Information

Application	**WB**
Primary Accession	Q96BI3
Other Accession	NP_057106, 51107
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**28996**

Goat Anti-APH1A Antibody - Additional Information

Gene ID 51107

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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-APH1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-APH1A 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:<a href="http://www.uniprot.org/citations/12522139"

target="_blank">12522139, PubMed:12763021, PubMed:12679784, PubMed:25043039, PubMed:26280335, PubMed:30598546, PubMed:30630874). Required for normal gamma-secretase assembly (PubMed:12522139, PubMed:12471034, 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.

Goat Anti-APH1A 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 Cytomety
- Cell Culture

Goat Anti-APH1A Antibody - Images



AF1072a (0.05 µg/ml) staining of Human Brain (Cerebral Cortex) lysate (35 µg protein in RIPA

buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-APH1A Antibody - Background

APH1 is a multipass transmembrane protein that interacts with presenilin (see PSEN1; MIM 104311) and nicastrin (APH2; MIM 605254) as a functional component of the gamma-secretase complex. The gamma-secretase complex is required for the intramembrane proteolysis of a number of membrane proteins, including the amyloid-beta precursor protein (APP; MIM 104760) and Notch (MIM 190198).

Goat Anti-APH1A Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
Human CRB2 inhibits gamma-secretase cleavage of amyloid precursor protein by binding to the presenilin complex. Mitsuishi Y, et al. J Biol Chem, 2010 May 14. PMID 20299451.
Aph-1 associates directly with full-length and C-terminal fragments of gamma-secretase substrates. Chen AC, et al. J Biol Chem, 2010 Apr 9. PMID 20145246.
APH1 polar transmembrane residues regulate the assembly and activity of presenilin complexes. Pardossi-Piquard R, et al. J Biol Chem, 2009 Jun 12. PMID 19369254.
Association between promoter polymorphisms in anterior pharynx-defective-1a and sporadic Alzheimer's disease in the North Chinese Han population. Wang Y, et al. Neurosci Lett, 2009 May 15. PMID 19368855.