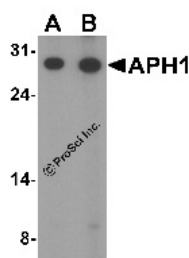


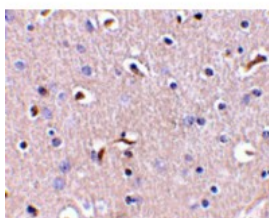


APH1 Antibody

CATALOG NUMBER: 4003



Western blot analysis of APH1 in RAW264.7 cell lysate with APH1 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of APH1 in human brain tissue with APH1 antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, IHC-P, WB
APPLICATIONS:	APH1 antibody can be used for detection of APH1 by Western blot at 0.5 - 1 ug/mL. Despite its predicted molecular weight, APH1 protein often migrates at aberrant locations in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 5 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1283 – RAW264.7 Cell Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 29 kDa Observed: 28 kDa
IMMUNOGEN:	APH1 antibody was raised against a 18 amino acid synthetic peptide from near the center of human APH1. The immunogen is located within amino acids 80 - 130 of APH1.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	APH1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	APH1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	APH1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	APH1 Antibody: APH-1, APH-1A, CGI-78, 6530402N02Rik, PSF, UNQ579/PRO1141, Gamma-secretase subunit APH-1A, Aph-1alpha, APH-1a
ACCESSION NO.:	AAH08732
PROTEIN GI NO.:	14250557
OFFICIAL SYMBOL:	APH1A
GENE ID:	51107

Background

BACKGROUND:	APH1 Antibody: APH1 was initially identified as a component of the Notch pathway in <i>C. elegans</i> . Along with nicastrin, PEN2, and presenilin-1 APH1 is an essential component of the gamma-secretase complex which cleave the amyloid precursor protein (APP) at what are known as the gamma- and epsilon-sites and can lead to the accumulation of the Amyloid beta peptide (Abeta) cleavage product that is associated with Alzheimer's disease. APH1 exists in at least three distinct isoforms with APH1a as the principal isoform present in the gamma-secretase complex. Mice deficient in this isoform, but not the other two, were lethal at E10.5, with impaired vascular and neural development observed.
REFERENCES:	1) Goutte C, Tsunozaki M, Hale VA, et al. APH-1 is a multipass membrane protein essential for the Notch signaling pathway in <i>Caenorhabditis elegans</i> embryos. <i>Proc. Natl. Acad. Sci. USA</i> 2002; 99:775-9. 2) Periz G and Fortini ME. Functional reconstitution of γ secretase through coordinated expression of presenilin, nicastrin, aph-1, and pen-2. <i>J. Neurosci. Res.</i> 2004; 77:309-22. 3) Selkoe DJ. The cell biology of β amyloid precursor protein and presenilin in Alzheimer's disease. <i>Trends Cell Biol.</i> 1998; 8:447-53. 4) Ma G, Li T, Price DL, et al. APH-1a is the principal mammalian aph-1 isoform present in g-secretase complexes during embryonic development. <i>Neuro. Dis.</i> 2005; 25:192-8.

FOR RESEARCH USE ONLY

December 12, 2016