

Aph-1b Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54574

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8WW43
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28460
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Aph-1b
Epitope Specificity	51-150/257
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein
SIMILARITY	Belongs to the APH-1 family.
SUBUNIT	Probable component of the gamma-secretase complex, a complex composed of a presenilin homodimer (PSEN1 or PSEN2), nicastrin (NCSTN), APH1 (APH1A or APH1B) and PEN2. Such minimal complex is sufficient for secretase activity, although other components may exist (By similarity). Interacts with PSEN1 and PSEN2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Anterior pharynx defective 1 (Aph-1) is a polytopic, seven-pass membrane protein that functions as one of the four essential components in the presenilin-Gamma-secretase enzyme complex. This enzyme complex is necessary for the intra-membrane proteolysis of several different membrane proteins, including the beta-Amyloid precursor protein, and is involved in multiple neurodevelopmental signaling pathways. Aph-1b and Aph-1a are splice variants of Aph-1. Aph-1b specifically lacks exon 4, which encodes for the entire fourth transmembrane domain, causing the protein to be destabilized. Deficiency of Aph-1a causes a reduction in Gamma-secretase activity, however deficiency of Aph-1b does not; thus, Aph-1b may execute redundant functions in the cell. Aph-1b expression and Gamma-secretase activity may be implicated in neurodevelopmental disorders, such as schizophrenia.

Additional Information

Gene ID	83464
Other Names	Gamma-secretase subunit APH-1B, APH-1b, Aph-1beta, Presenilin-stabilization factor-like, APH1B, PSFL

Target/Specificity	Weakly or not expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, colon, skeletal muscle, heart and brain.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

Protein Information

Name	APH1B
Synonyms	PSFL
Function	Probable subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral proteins such as Notch receptors and APP (amyloid-beta precursor protein). It probably represents a stabilizing cofactor for the presenilin homodimer that promotes the formation of a stable complex. Probably present in a minority of gamma-secretase complexes compared to APH1A.
Cellular Location	Membrane; Multi-pass membrane protein
Tissue Location	Weakly or not expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, colon, skeletal muscle, heart and brain.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.