

# APH1 (IN) antibody (pAb)

## Rabbit Anti-Human/Mouse/Rat APH1 (IN)

### Instruction Manual

Catalog Number	PK-AB718-4003
Synonyms	APH1 Antibody; Anterior pharynx defective 1, presenilin stabilization factor
Description	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 gammasecretase complex which cleave the amyloid precursor protein (APP) at what are known as the gamma and gamma 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 gammasecretase complex. Mice deficient in this isoform, but not the other two, were lethal at E10.5, with impaired vascular and neural development observed. Despite its predicted molecular weight, APH1 protein often migrates at aberrant locations in SDS-PAGE.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	APH1 antibody was raised in rabbits against an 18 amino acid peptide from near the center of human APH1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, IHC Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. APH1 antibody can be used for detection of APH1 by Western blot at 0.5 - 1 µg/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 µg/mL.
Images	Available upon request.
References	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. Periz G and Fortini ME. Functional reconstitution of $\gamma$ -secretase through coordinated expression of presenilin, nicastrin, aph-1, and pen-2. <i>J. Neurosci. Res.</i> 2004; 77:309-22. Selkoe DJ. The cell biology of beta-amyloid precursor protein and presenilin in Alzheimer's disease. <i>Trends Cell Biol.</i> 1998; 8:447-53. Ma G, Li T, Price DL, et al. APH-1a is the principal mammalian aph-1 isoform present in $\gamma$ -secretase complexes during embryonic development. <i>Neuro. Dis.</i> 2005; 25:192-8.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4003P; APH1 Peptide Cat.No. PK-AB718-1303; Human Brain Tissue Lysate

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