

## Nicastrin Antibody

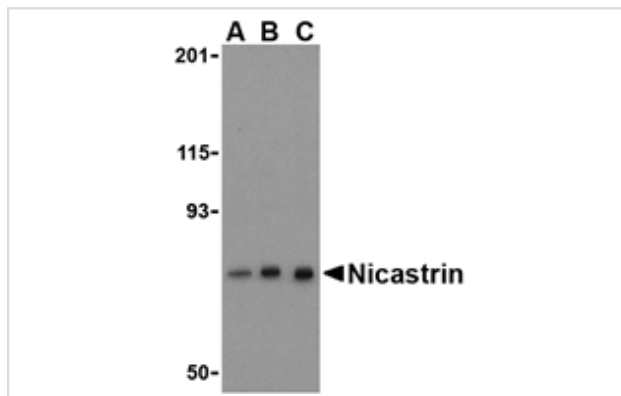
Catalog No: #24471

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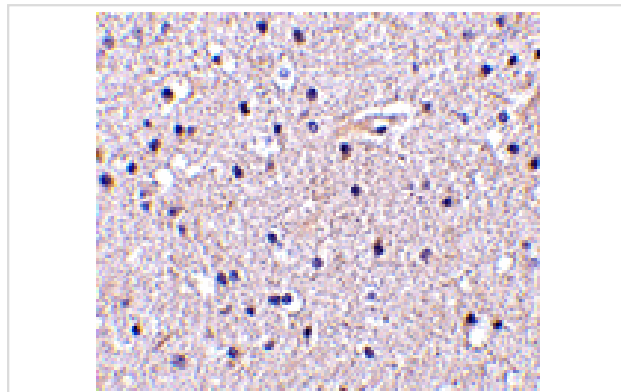
## Description

Product Name	Nicastrin Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 17 amino acid peptide from near the carboxy terminus of human Nicastrin.
Target Name	Nicastrin
Other Names	Anterior pharynx defective 2, APH-2
Accession No.	NP_056146
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for 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.

## Images



Western blot analysis of Nicastrin in mouse brain tissue lysate with Nicastrin antibody at (A) 0.5, (B) 1, and (C) 2 ug/mL.



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

## Background

Nicastrin, in addition to presenilin, PEN2, and APH-1 forms the gamma-secretase protein complex, a membrane-bound aspartyl protease that can cleave certain proteins at peptide bonds buried within the hydrophobic environment of the lipid bilayer. This cleavage is responsible for a key step in signaling from several cell-surface receptors and is thought to be required for the generation of the neurotoxic amyloid peptides that are central to the pathogenesis of Alzheimer's disease. Like the tumor necrosis factor- $\alpha$ -converting enzyme (TACE) and the b-site cleavage enzyme (BACE) protease families, gamma-secretase will cleave the amyloid precursor protein (APP), but within the intramembrane region of APP, resulting in either the non-toxic p3 (from the alpha and gamma cleavage site) or the toxic Abeta amyloid peptide (from the beta and gamma cleavage site). It is thought that accumulation of the Abeta peptide is the precursor to Alzheimer's disease. Nicastrin is also thought to be involved in cell proliferation and signaling, especially in regards to activation of Notch receptors as loss of Nicastrin expression results in mouse embryonic lethality.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.