

Rabbit Anti-Nicastrin antibody

SL6058R

Product Name:	Nicastrin
Chinese Name:	老年性痴呆蛋白APH2抗体
Alias:	Anterior pharynx defective 2; APH 2; APH2; ATAG1874; KIAA0253; Ncstn; NCT;
	NICA_HUMAN; Nicastrin; RP11 517F10.1; RP11517F101.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	75kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Nicastrin:21-
	120/709 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The Presenilin 1 (PS1) and Presenilin 2 (PS2) transmembrane proteins are components
	of high molecular weight complexes. These complexes mediate proteolytic cleavage
	within the transmembrane domain of several proteins, including the J-Amyloid
	precursor protein ($\int APP$) and Notch. Missense mutations in the genes encoding the
	Presenilin proteins increase the proteolysis of APP and results in the overproduction of

the neurotoxic \int -Amyloid peptide, which results in a condition associated with Familial Alzheimer's disease (FAD). A novel component of the presenilin complex, nicastrin, is a type I transmembrane glycoprotein that is involved in mediating Notch/GLP-1 signaling. In addition, nicastrin contributes to the processing of \int APP, which makes nicastrin an attractive potential target for modulating the production of \int -Amyloid in patients with Alzheimer's disease. Originally purified from immunoprecipitated PS1 complexes from HEK293 cells, nicastrin contains hydrophilic amino and carboxy-terminal domains, a short, hydrophobic transmembrane domain and potential N-myristoylation and phosphorylation sites.

Function:

Essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). It probably represents a stabilizing cofactor required for the assembly of the gamma-secretase complex.

Subunit: Belongs to the nicastrin family.

Subcellular Location:

Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Tissue Specificity: Widely expressed.

DISEASE:

Defects in NCSTN are the cause of familial acne inversa type 1 (ACNINV1) [MIM:142690]. A chronic relapsing inflammatory disease of the hair follicles characterized by recurrent draining sinuses, painful skin abscesses, and disfiguring scars. Manifestations typically appear after puberty.

Similarity: Belongs to the nicastrin family.

SWISS: Q92542

Gene ID: 23385

Database links:

Entrez Gene: 23385 Human

Entrez Gene: 59287 Mouse

Omim: 605254 Human
<u>SwissProt: Q92542</u> Human
SwissProt: P57716 Mouse
Unigene: 517249 Human
Unigene: 218203 Mouse
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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