

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; Ncstrn; NCT; NICA_HUMAN; Nicastrin; RP11 517F10.1; RP11517F101.
Research Area	Neurobiology Stem cells
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Chicken,Pig,Cow,Horse) WB=1:500-2000 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	75kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Nicastrin: 21-120/709 <Extracellular>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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 β -Amyloid precursor protein (β APP) and Notch. Missense mutations in the genes encoding the Presenilin proteins increase the proteolysis of β APP and results in the overproduction of the neurotoxic β -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 β APP, which makes nicastrin an attractive potential target for modulating the production of β -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

[SwissProt: Q92542](#) Human

[SwissProt: P57716](#) Mouse

[Unigene: 517249](#) Human

[Unigene: 218203](#) Mouse