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Anti-NCSTN Antibody

Catalog # ABO11560

Product Information

Application	WB
Primary Accession	Q92542
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Nicastrin(NCSTN) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	23385
Other Names	Nicastrin, NCSTN, KIAA0253
Calculated MW	78411
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Membrane ; Single-pass type I membrane protein . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Tissue Specificity	Widely expressed. .
Source	Eukaryota
Protein Name	Nicastrin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Nicastrin(72-88aa VIHVVEKEEDLQWVLTD), different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

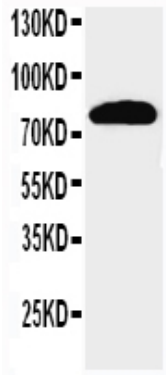
Protein Information

Name	NCSTN
Synonyms	KIAA0253
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 (amyloid- beta precursor protein) (PubMed:10993067, PubMed:12679784, PubMed:25043039, PubMed:26280335, PubMed:30598546, PubMed:30630874). The gamma-secretase complex plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels.
Cellular Location	Membrane; Single-pass type I membrane protein. Cytoplasmic vesicle membrane; Single-pass type I membrane protein. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV
Tissue Location	Detected in brain (at protein level) (PubMed:10993067). Widely expressed (PubMed:11396676)

Background

Nicastrin, also known as NCSTN, is a protein that is a part of the gamma secretase protein complex. It is mapped to 1q23.2. This gene is not catalytically active, but instead promotes the maturation and proper trafficking of the other proteins in the gamma secretase protein complex, all of which undergo significant post-translational modification before becoming active in the cell. NCSTN encodes a Type I transmembrane glycoprotein that is an integral component of the multimeric gamma-secretase complex. The encoded protein cleaves integral membrane proteins, including Notch receptors and beta-amyloid precursor protein, and may be a stabilizing cofactor required for gamma-secretase complex assembly. The cleavage of beta-amyloid precursor protein yields amyloid beta peptide, the main component of the neuritic plaque and the hallmark lesion in the brains of patients with Alzheimer's disease. Nicastrin has also been identified as a regulator of neprilysin, an enzyme involved in the degradation of amyloid beta fragment.

Images



Anti-NCSTN antibody, ABO11560, All Western blottingAll lanes: Anti-NCSTN(ABO11560) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 40ugPredicted bind size: 78KDObserved bind size: 78KD

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