

Anti-NCSTN Antibody
Catalog # ABO11560**Specification**

Anti-NCSTN Antibody - 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.

Anti-NCSTN Antibody - Additional Information

Gene ID 23385

Other Names

Nicastrin, NCSTN, KIAA0253

Calculated MW

78411 MW KDa

Application Details

Western blot, 0.1-0.5 µg/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. .

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 VIHVVKEEDLQWVLTD), 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.

Anti-NCSTN Antibody - 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

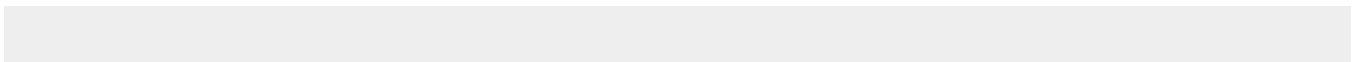
Tissue Location

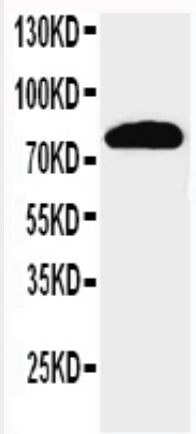
Detected in brain (at protein level) (PubMed:10993067). Widely expressed (PubMed:11396676)

Anti-NCSTN Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-NCSTN Antibody - 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

Anti-NCSTN Antibody - 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.