

Rabbit anti-Human Nicastrin Polyclonal Antibody | anti-NCSTN antibody

Anti-Nicastrin Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA259512	Rabbit	Human	Immunoprecipitation, Immunocytochemistry, ELISA, Western Blot

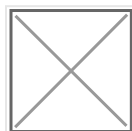
PRODUCT SYNONYMS

Nicastrin; Polyclonal Antibody; Anti-Nicastrin Antibody; Rabbit Polyclonal; Nicastrin Antibody; Rabbit PAb; Antigen Affinity Purified; nicastrin; Anti-APH2 Antibody; Anti-ATAG1874 Antibody; Anti-KIAA0253 Antibody; Anti-UNQ1874/PRO4317 Antibody; anti-NCSTN antibody

PRODUCT SPECIFICATIONS

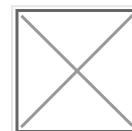
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Nicastrin
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-NCSTN antibody	IP (Immunoprecipitation), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human Nicastrin Protein (NP_056146.1; Met1-Glu669). Nicastrin specific IgG was purified by Human Nicastrin affinity chromatography.
Preparation and Storage	This antibody can be stored at 2 degree C-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

IMAGES



IP (Immunoprecipitation)

NCSTN was immunoprecipitated using: Lane A:0.5 mg A431 Whole Cell Lysate Lane B:0.5 mg Jurkat Whole Cell Lysate 4 uL anti-NCSTN rabbit polyclonal antibody and 60ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti-NCSTN rabbit polyclonal antibody, at 1:100 dilution Secondary antibody: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 120 kDa Observed band size :130 kDa



IF (Immunofluorescence)

Immunofluorescence staining of NCSTN-His in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human NCSTN-His polyclonal antibody (dilution ratio 1:100) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to Cytoplasm.



WB (Western Blot)

Anti-NCSTN rabbit polyclonal antibody at 1:500 dilution Lane A: A431 Whole Cell Lysate Lane B: Jurkat Whole Cell Lysate Lysates/proteins at 30ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 78 kDa Observed band size: 130 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-NCSTN antibody	Nicastrin (NCST, or NCT), a single-pass membrane glycoprotein that harbors a large extracellular domain, is an essential component of the gamma-secretase complex. Several lines of evidence indicate that the members of these complexes could also contribute to the control of cell death. NCT controls cell death via phosphoinositide 3-kinase/Akt and p53-dependent pathways and that this function remains independent of the activity and molecular integrity of the gamma-secretase complexes. Increasing pieces of evidence have shown that Nicastrin/NCSTN plays a crucial role in gamma-cleavage of the amyloid precursor protein (APP). The glycoprotein Nicastrin is an essential component of the gamma-secretase complex, a high molecular weight complex that also contains the presenilin proteins, Aph-1 and Pen-2. The gamma-secretase complex is not only involved in APP processing but also in the processing of an increasing number of another type I integral membrane proteins. As the largest subunit of the gamma-secretase complex, Nicastrin plays a crucial role in its activation. Inhibition of NCSTN demonstrated an altered gamma-cleavage activity, suggesting its potential implication in developing Alzheimer's disease (AD). Besides, Nicastrin can function to maintain epithelial to mesenchymal transition during breast cancer progression. Anti-nicastrin polyclonal and monoclonal antibodies were able to decrease notch1 and vimentin expression and reduced the invasive capacity of breast cancer cells in vitro.
References	H. G. e. al. (2007). Degradatio. o. nicastrin. involve. bot. proteasom. an. lysosome. . Neurochem. 101(4). 982-92. Hayash. I. e. al. (2009). Singl. chai. variabl. fragmen. agains. nicastrin. inhibit. th. gamma-secretas. activity. . Bio. Chem. 284(41). 27838-47. M. Z. e. al. (2009). Associatio. betwee. promote. polymorphism. o. th. nicastrin. gen. an. sporadi. Alzheimer'. diseas. i. Nort. Chines. Ha. population. Neurosc. Lett. 458(3). 136-9. Pardossi-Piquar. R. e. al. (2009). p53-dependen. contro. o. cel. deat. b. nicastrin. lac. o. requiremen. fo. presenilin-dependen. gamma-secretas. complex. . Neurochem. 109(1). 225-37. Filipovi. A. e. al. (2011). Biologica. an. clinica. implicatio. o. nicastrin. expressio. i. invasiv. breas. cancer. Breas. Cance. Re. Treat. 125(1). 43-53.

NCBI AND UNIPROT INFORMATION

NCBI GI #	24638433
NCBI GeneID	23385
NCBI Accession #	NP_056146.1
NCBI GenBank Nucleotide #	NM_015331.2
Molecular Weight	76,744 Da
NCBI Official Full Name	nicastrin isoform 1
NCBI Official Synonym Full Names	nicastrin
NCBI Official Symbol	NCSTN
NCBI Official Synonym Symbols	ATAG1874
NCBI Protein Information	nicastrin; anterior pharynx-defective 2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.