

Product Name: KD-Validated Nicastrin Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01241

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 78.4kDa

Antigen Information

Gene Name	NCSTN
Alternative Names	Nicastrin; ATAG1874; Anterior Pharynx-Defective 2; KIAA0253
Gene ID	23385.0
SwissProt ID	Q92542
Immunogen	A synthesized peptide derived from human Nicastrin

Background

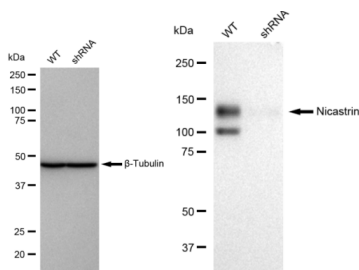
This gene encodes a type I transmembrane glycoprotein that is an integral component of the multimeric gamma-secretase complex. The encoded protein cleaves integral membrane proteins, including Notch receptors and beta-amyloid precursor protein, and may be a stabilizing cofactor required for gamma-secretase 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; however, the nature of the encoded protein's role in Alzheimer's disease is not known for certain. Mutations in this gene are associated with familial acne inversa. A pseudogene of this gene is present on chromosome 21. Alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq, Feb 2014]

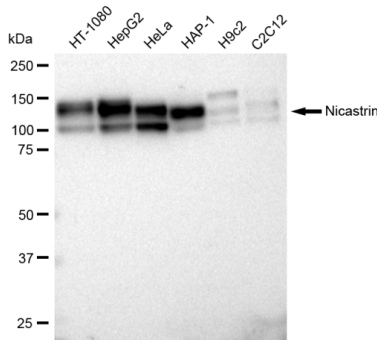
Research Area

Neuroscience, Stem Cells

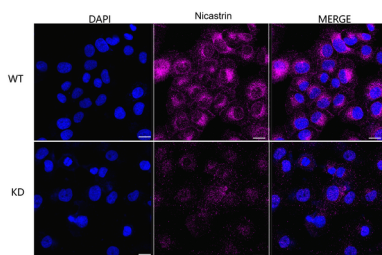
Image Data



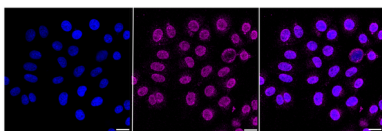
Western blotting analysis using Nicastrin antibody (KVA01241). Nicastrin expression in wild type (WT) and Nicastrin shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Nicastrin antibody (KVA01241, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



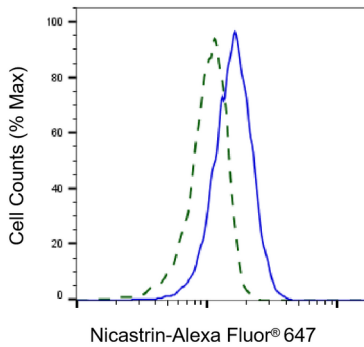
Western blotting analysis using Nicastrin antibody (KVA01241). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Nicastrin antibody (KVA01241, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



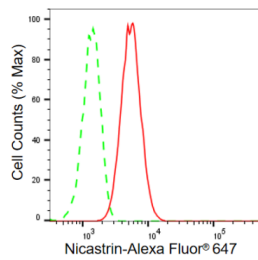
Immunocytochemical staining of HT-1080 cells using Nicastrin antibody (KVA01241, 1:1,000), Top panel: wild-type (WT); Bottom panel: Nicastrin shRNA knockdown (KD). Nuclei were stained blue with DAPI; Nicastrin was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with Nicastrin antibody (KVA01241, 1:1,000). Nuclei were stained blue with DAPI; Nicastrin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of Nicastrin knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT1080 cells were stained with Nicastrin antibody (KVA01241, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Nicastrin expression in HepG2 cells using Nicastrin antibody (KVA01241, 1:2,000). Green, isotype control; red, Nicastrin.