Recombinant Mouse Nicastrin/NCSTN Protein (His Tag)

Catalog No. PKSM040430

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	9430068N19Rik;AA727311;Aph2;D1Dau13e;Kiaa0253;mKIAA0253;NCSTN;Nct
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met1-Gln668
Accession	P57716
Calculated Molecular Weight	73.0 kDa
Observed molecular weight	95-99 kDa
Tag	C-His
Bioactivity	Not validated for activity
Properties	
Purity	> 99 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data

KDa	М
116	
45.0	
25.0	
35.0	
25.0	-
18.4	-
14.4	-

> 99 % as determined by reducing SDS-PAGE.

Background

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

For Research Use Only

Toll-free: 1-888-852-8623 Web: <u>www.elabscience.com</u> Tel: 1-832-243-6086 Email: <u>techsupport@elabscience.com</u>

Elabscience®

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 evidences 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 which 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 other type I integral membrane proteins. As the largest subunit of the gamma-cleavage activity, suggesting its potential implication in developing Alzheimer's disease (AD). In addition, 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.

For Research Use Only