abcam

Product datasheet

Recombinant Human Nogo protein ab163499

1 References 1 Image

Description

Product name Recombinant Human Nogo protein

Expression system Wheat germ

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MEDLDQSPLVSSSDSPPRPQPAFKYQFVREPEDEEEEE

EEEEEDEDEDLE

ELEVLERKPAAGLSAAPVPTAPAAGAPLMDFGNDFVPPA

PRGPLPAAPPV

APERQPSWDPSPVSSTVPAPSPLSAAAVSPSKLPEDDE

PPARPPPPPPAS

VSPQAEPVWTPPAPAPAAPPSTPAAPKRRGSSGSVDET

LFALPAASEPVI

RSSAENMDLKEQPGNTISAGQEDFPSVLLETAASLPSLSP

LSAASFKEHE

YLGNLSTVLPTEGTLQENVSEASKEVSEKAKTLLIDRDLTE

FSELEYSEM

GSSFSVSPKAESAVIVANPREEIIVKNKDEEEKLVSNNILH

NQQELPTAL

TKLVKEDEVVSSEKAKDSFNEKRVAVEAPMREEYADFK

PFERVWEVKDSK

EDSDMLAAGGKIESNLESKVDKKCFADSLEQTNHEKDSE

SSNDDTSFPST

PEGIKDRSGAYITCAPFNPAATESIATNIFPLLGDPTSENKT

DEKKIEEK

KAQIVTEKNTSTKTSNPFLVAAQDSETDYVTTDNLTKVTEE

VVANMPEGL

TPDLVQEACESELNEVTGTKIAYETKMDLVQTSEVMQESL

YPAAQLCPSF

EESEATPSPVLPDIVMEAPLNSAVPSAGASVIQPSSSPLE

ASSVNYESIK

HEPENPPPYEEAMSVSLKKVSGIKEEIKEPENINAALQETE

APYISIACD

LIKETKLSAEPAPDFSDYSEMAKVEQPVPDHSELVEDSS

1

PDSEPVDLFSD

DSIPDVPQKQDETVMLVKESLTETSFESMIEYENKEKLSA

LPPEGGKPYL

ESFKLSLDNTKDTLLPDEVSTLSKKEKIPLQMEELSTAVYS

NDDLFISKE

AQIRETETFSDSSPIEIIDEFPTLISSKTDSFSKLAREYTDLE

VSHKSEI

 ${\tt ANAPDGAGSLPCTELPHDLSLKNIQPKVEEKISFSDDFSK}$

NGSATSKVLL

LPPDVSALATQAEIESIVKPKVLVKEAEKKLPSDTEKEDR

SPSAIFSAEL

SKTSVVDLLYWRDIKKTGVVFGASLFLLLSLTVFSIVSVTAY

IALALLSV

TISFRIYKGVIQAIQKSDEGHPFRAYLESEVAISEELVQKYSN

SALGHVN

CTIKELRRLFLVDDLVDSLKFAVLMWVFTYVGALFNGLTLL

ILALISLFS

VPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKA

Ε

Amino acids 1 to 1192

Tags GST tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of ab163499 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Western blot

ELISA

Form Liquid

Additional notes

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

Function

Developmental neurite growth regulatory factor with a role as a negative regulator of axon-axon adhesion and growth, and as a facilitator of neurite branching. Regulates neurite fasciculation, branching and extension in the developing nervous system. Involved in down-regulation of growth, stabilization of wiring and restriction of plasticity in the adult CNS. Regulates the radial migration of cortical neurons via an RTN4R-LINGO1 containing receptor complex (By similarity). Isoform 2 reduces the anti-apoptotic activity of Bcl-xl and Bcl-2. This is likely consecutive to their change in

subcellular location, from the mitochondria to the endoplasmic reticulum, after binding and sequestration. Isoform 2 and isoform 3 inhibit BACE1 activity and amyloid precursor protein

processing.

Tissue specificity Isoform 1 is specifically expressed in brain and testis and weakly in heart and skeletal muscle.

lsoform 2 is widely expressed except for the liver. Isoform 3 is expressed in brain, skeletal muscle

and adipocytes. Isoform 4 is testis-specific.

Sequence similarities Contains 1 reticulon domain.

Domain Three regions, residues 59-172, 544-725 and the loop 66 amino acids, between the two

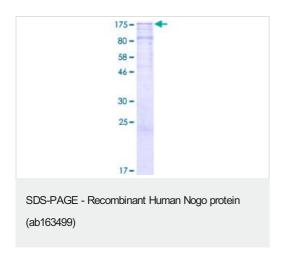
transmembrane domains, known as Nogo-66 loop, appear to be responsible for the inhibitory effect on neurite outgrowth and the spreading of neurons. This Nogo-66 loop, mediates also the

binding of RTN4 to its receptor.

Cellular localization Endoplasmic reticulum membrane. Anchored to the membrane of the endoplasmic reticulum

through 2 putative transmembrane domains.

Images



ab163499 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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