

Datasheet for ABIN7317322

Reticulon 4 Protein (RTN4) (GST tag)



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Overview

Quantity:	100 µg
Target:	Reticulon 4 (RTN4)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Reticulon 4 protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human RTN4/NOGO-A Protein (GST Tag)(Active)
Sequence:	Met 1-Val 185
Characteristics:	A DNA sequence encoding the human RTN4 (NP_065393.1) N-terminal fragment (Met 1-Val 185) was fused with the GST tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its ability to bind recombinant human RTN4R in a functional ELISA.

Target Details

Target:	Reticulon 4 (RTN4)
Alternative Name:	RTN4/NOGO-A (RTN4 Products)
Background:	Background: Reticulon-4, also known as Foccen, Neurite outgrowth inhibitor, Nogo protein,

Target Details

Neuroendocrine-specific protein, Neuroendocrine-specific protein C homolog, RTN-x, Reticulon-5 and RTN4, is a multi-pass membrane protein which contains one reticulon domain.

Isoform 1 of RTN4 is specifically expressed in brain and testis and weakly in heart and skeletal muscle. Isoform 2 of RTN4 is widely expressed except for the liver. Isoform 3 of RTN4 is expressed in brain, skeletal muscle and adipocytes. Isoform 4 of RTN4 is testis-specific.

Reticulon-4 / RTN4 is a 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.

Reticulon-4 / RTN4 regulates neurite fasciculation, branching and extension in the developing nervous system. Reticulon-4 / RTN4 is involved in down-regulation of growth, stabilization of wiring and restriction of plasticity in the adult CNS. It regulates the radial migration of cortical neurons via an RTN4R-LINGO1 containing receptor complex. Isoform 2 of RTN4 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 of RTN4 inhibit BACE1 activity and amyloid precursor protein processing.

Synonym: ASY;DGU;DKFZp781L1143;HIGM4;Nbla00271;Nbla10545;NI220/250;NOGO;NOGO-A;Nogo-B;Nogo-C;NOGOC;NSP;NSP-CL;RTN-X;RTN4-A;RTN4-B1;RTN4-B2;RTN4-C;UDG;UNG1;UNG15;UNG2

Molecular Weight:	46.2 kDa
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NCBI Accession:	NP_065393
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Pathways:	Neurotrophin Signaling Pathway , Regulation of Cell Size , SARS-CoV-2 Protein Interactome
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile 20 mM Tris, 150 mM NaCl, 1 mM DTT, 0.2 mM GSH, pH 7.0
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	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
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samples are stable at < -20°C for 3 months.