Recombinant Human RTN4/NOGO-A Protein (GST Tag)

Catalog Number: PKSH030757

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

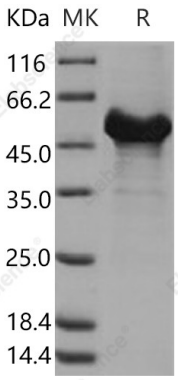
Description

Species	Human
Source	E.coli-derived Human RTN4/NOGO-A protein Met 1-Val 185, with an N-terminal GST
Calculated MW	130 kDa
Observed MW	48 kDa
Accession	NP_065393.1
Bio-activity	Not validated for activity

Properties

Purity	> 70% as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
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 20 mM Tris, 150 mM NaCl, 1 mM DTT, 0.2 mM GSH, pH 7.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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



> 70 % as determined by reducing SDS-PAGE.

Background

Reticulon-4, also known as Foocen, Neurite outgrowth inhibitor, Nogo protein, Neuroendocrine-specific protein, Neuroendocrine-specific protein C homolog, RTN-x, Reticulon-5 and RTN4, is a multi-pass membrane protein which contains onereticulon domain. Isoform1of RTN4 is specifically expressed in brain and testis and weakly in heart and skeletal muscle. Isoform2 of RTN4 is widely expressed except for the liver. Isoform3of RTN4 is expressed in brain, skeletal muscle and adipocytes. Isoform4of 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.

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