Recombinant Human Neuregulin-1/NRG1-β1 Protein (EGF Domain, Fc Tag)

Catalog Number: PKSH031068

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

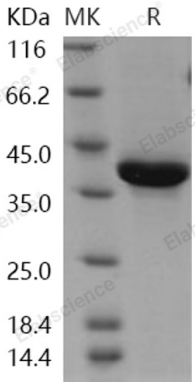
Description

Species	Human
Source	HEK293 Cells-derived Human Neuregulin-1/NRG1-β1 protein Thr 176-Lys 246, with an N-terminal hFc
Calculated MW	36.7 kDa
Observed MW	38 kDa
Accession	Q02297-6
Bio-activity	1. Immobilized Rhesus ErbB3 at 2 μg/mL (100 μl/well) can bind human NRG1 (isoform Beta1), The EC_{50} of human NRG1 (isoform Beta1) is 0.58 μg/mL. 2. Immobilized human ErbB3 at 2 μg/mL (100 μl/well) can bind human NRG1 (isoform Beta1), The EC_{50} of human NRG1 (isoform Beta1) is 0.43 μg/mL.

Properties

Purity	> 86 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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% 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



> 86 % as determined by reducing SDS-PAGE.

Background

Neuregulin 1 or NRG1 is one of four proteins in the neuregulin family that act on the EGFR family of receptors. This growth factor was originally identified as a 44-kD glycoprotein that interacts with the NEU / ERBB2 receptor tyrosine kinase to increase its phosphorylation on tyrosine residues. NRG1 is a trophic factor that has been implicated in neural development; neurotransmission; and synaptic plasticity. NRG1 has multiple isoforms that are generated by usage of different promoters and alternative splicing of a single gene. Neuregulin 1 (NRG1) is essential for the development and function of multiple organ systems; and its dysregulation has been linked to diseases such as cancer and schizophrenia. NRG1 is a schizophrenia candidate gene and plays an important role in brain development and neural function. Schizophrenia is a complex disorder; with etiology likely due to epistasis.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web:www.elabscience.com
Email:techsupport@elabscience.com