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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

 Mol_Mass
 36.7 kDa

 Accession
 Q02297-6

Bio-activity 1. Immobilized Rhesus ErbB3 at 2 μg/mL (100 μl/well) can bind human NRG1

(isoform Beta1), The EC50 of human NRG1 (isoform Beta1) is 0.58 μ g/mL. 2. Immobilized human ErbB3 at 2 μ g/mL (100 μ l/well) can bind human NRG1 (isoform

Beta1), The EC50 of human NRG1 (isoform Beta1) is 0.43 µg/mL.

Properties

Purity > 86 % as determined by reducing SDS-PAGE.

Endotoxin $< 1.0 \, \text{EU} \, \text{per} \, \mu \text{g} \, \text{of the protein as determined by the LAL method.}$

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

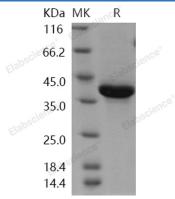
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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

For Research Use Only

Fax: 1-832-243-6017

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Neuregulin 1 or NRGl 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. NRGl is a trophic factor that has been implicated in neural development; neurotransmission; and synaptic plasticity. NRGl has multiple isoforms that are generated by usage of different promoters and alternative splicing of a single gene. Neuregulin 1 (NRGl) is essential for the development and function of multiple organ systems; and its dysregulation has been linked to diseases such as cancer and schizophrenia. NRGl 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.

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