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# Recombinant Human Pro-Neuregulin-1/NRG1-β1 Protein (aa 177-241)

Catalog Number: PKSH032941

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

#### Description

Species Human

Source E.coli-derived Human Pro-Neuregulin-1;NRG1 β1 protein Ser177-Glu241

 Calculated MW
 7.5 kDa

 Observed MW
 8-10 kDa

 Accession
 Q02297-6

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % 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

°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 a 0.2 μm filtered solution of PBS, pH 7.4.

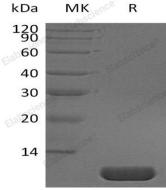
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

## Background

neuregulin-1 (heregulin-1;NRG1) is a member of neuregulin family; which is comprised of four genes that encode a large number of secreted or membrane-bound isoforms. All family members share an EGF-like domain that interacts with the ErbB family of tyrosine kinase receptors. NRG1 isoforms can be classified into type I; type II and type III isoforms. NRG1 directs ligand for ERBB3 and ERBB4 tyrosine kinase receptors; concomitantly recruits ERBB1 and ERBB2 coreceptors; resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. NRG proteins show distinct spatial and temporal expression patterns and play important roles during development of both the nervous system and the heart.

#### For Research Use Only

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