

Human NRG1 Beta 1 Protein

Cat. No. NRG-HM201



Description

Source	Recombinant Human NRG1 Beta 1 Protein is expressed from HEK293 with hFc tag at the N-terminus. It contains Ser2-Lys246.
Accession	Q02297-6
Molecular Weight	The protein has a predicted MW of 54.00 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Neuregulin-1 (NRG-1) is a ligand of the epidermal growth factor receptor (erbB), and its interaction involves activation of the glutamatergic N-methyl-D-aspartate receptor, which increases the expression of the $\beta 2$ subunit of the γ -aminobutyric acid receptor and subunits of the nicotinic acetylcholine receptor.

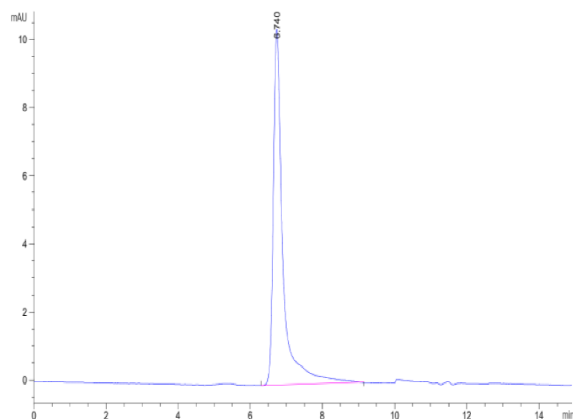
Assay Data

Bis-Tris PAGE



Human NRG1 Beta 1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



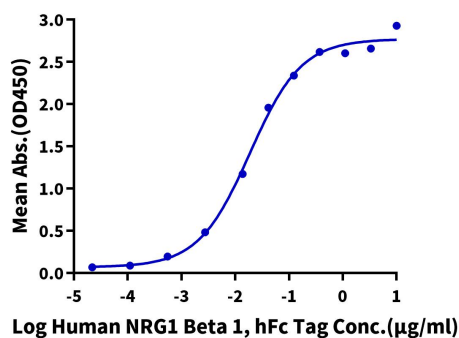
The purity of Human NRG1 Beta 1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human NRG1 Beta 1, hFc Tag ELISA

0.2µg Human Her4, His Tag Per Well

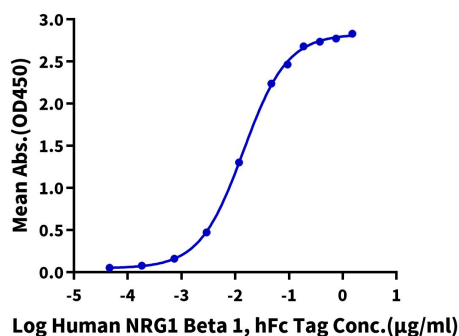


Immobilized Human Her4, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human NRG1 Beta 1, hFc Tag with the EC50 of 18.7ng/ml determined by ELISA (QC Test).

ELISA Data

Human NRG1 Beta 1, hFc Tag ELISA

0.5µg Human Her3, His Tag Per Well



Immobilized Human Her3, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human NRG1 Beta 1, hFc Tag with the EC50 of 14.2ng/ml determined by ELISA.