Recombinant Human Pro-Neuregulin-1/NRG1--β1 Protein (aa 1-246, His Tag)(Active)



Catalog Number:PKSH032940

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

Description

Synonyms Pro-neuregulin-1, Neuregulin-1 beta 1, NRG1-beta 1, HRG1-beta 1, EGF, NRG1,

GGF, HGL, HRGA, NDF, SMDF,

Species Human
Expression Host E.coli

SequenceMet 1-Lys246AccessionQ02297-6Calculated Molecular Weight29.0 kDaObserved molecular weight38 kDaTagN-6His

Bioactivity Immobilized Human NRG1Beta-His at 10μg/ml(100 μl/well) can bind Human

HER3-Fc(Cat: PKSH033438). The ED50 of Human Glypican-3-His is 5. 18 ug/ml.

Properties

Purity > 95 % as determined by reducing SDS-PAGE.

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

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 4mM HCl.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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.

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.

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