Product Data:

Product SKU: RPES2769

Size: 10μg

Species: Human

Expression host: E. coli

Uniprot: Q02297-6

Protein Information:

Molecular Mass:	26.9 kDa
AP Molecular Mass:	34 kDa
Tag:	
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per μg as determined by the LAL method.
Storage:	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℃ 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 a 0.2 μm filtered solution of 4mM HCl.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Pro-neuregulin;Neuregulin beta 1;NRG1-beta 1;HRG1-beta 1; EGF;NRG1; GGF; HGL; HRGA; NDF; SMDF;

Sequence: Ser2-Lys246

Background:

Pro-neuregulin,Neuregulin beta 1（NRG1） is a single-pass type I membrane protein and belongs to the neuregulin family . It contains 1 EGF-like domain and 1 Ig-like C2-type (immunoglobulin-like) domain. Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. The protein concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vesicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart. Isoform 10 may play a role in motor and sensory neuron development.