

Recombinant Human NRG1Beta (245AA)**Catalog No.: RP0082****Basic Information****Information**

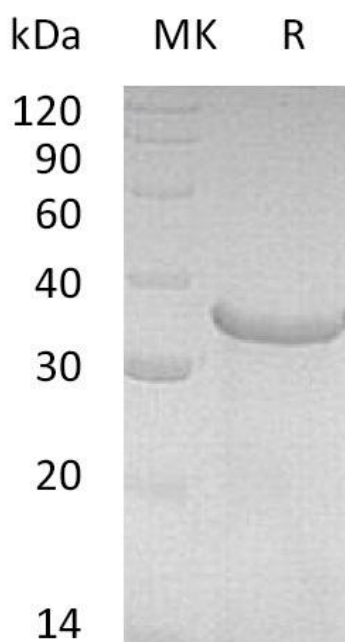
Source	<i>E.coli</i>
Description	Recombinant Human Neuregulin-1 Beta is produced by our E.coli expression system and the target gene encoding Ser2-Lys246 is expressed.
Accession	AAA58639.1
Known As	Pro-neuregulin-1; Neuregulin-1 beta 1; NRG1-beta 1; HRG1-beta 1; EGF; NRG1; GGF; HGL; HRGA; NDF; SMDF
Predicted Mol Mass	26.9 KDa
Apparent Mol Mass	34 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/µg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

Experimental Data

Purity-SDS-PAGE



Greater than 85% as determined by reducing SDS-PAGE. (QC verified)

Background

Pro-neuregulin-1, Neuregulin-1 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.