

## NRG1

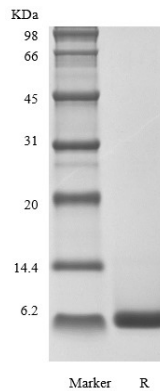
### Recombinant Human Neuregulin 1-beta2 EGF-like domain, GMP Grade

<b>Catalog No.</b>	CRN005A-GMP CRN005B-GMP	<b>Quantity:</b>	5 µg 100 µg
<b>Alternate Names:</b>	Pro-neuregulin-1, membrane-bound isoform, Pro-NRG1, Neuregulin-1		
<b>Description:</b>	Neuregulin 1 belongs to a family of structurally related polypeptide growth factors and is produced in numerous isoforms by alternative splicing, which allows it to perform a wide variety of functions. These isoforms include heregulins (HRGs), glial growth factors (GGFs) and sensory and motor neuron-derived factor (SMDF). They all have the Ig and EGF-like domain, and can bind to ErbB3 and ErbB4 receptor tyrosin kinases. This binding induces ErbB3 and ErbB4 heterodimerization with ErbB2, stimulating intrinsic kinase activity, which leads to tyrosine phosphorylation. NRG1 isoforms have functions of inducing the growth and differentiation of epithelial, neuronal, glial, and other types of cells.		
	<b>Manufacturing and testing of this product complies with ICH Q7 guidelines.</b>		
<b>UniProt ID:</b>	Q02297		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	~7.0 kDa (61 aa) monomer		
<b>Formulation:</b>	Lyophilized from sterile-filtered PBS, pH 7.4		
<b>Purity:</b>	> 98% by SDS-PAGE and HPLC		
<b>Endotoxin Level:</b>	< 0.01EU/µg as determined by LAL method.		
<b>Contaminants:</b>	< 0.10% host cell protein by ELISA		
<b>Biological Activity:</b>	ED <sub>50</sub> < 5.0 ng/ml, determined by dose-dependent cell proliferation assay using serum free human MCF-7 cells.		
<b>Specific Activity:</b>	> 2.0 × 10 <sup>5</sup> U/mg		
<b>Amino Acid Sequence:</b>	SHLVKCAEKE KTFVNGGEC FMVKDLSNPS RYLCKCPNEF TGDRQCQNYVM ASFYKAEELY Q		
<b>Reconstitution:</b>	<b>Centrifuge the vial prior to opening.</b> Reconstitute with sterile water at 0.1-1.0 mg/ml by gently pipetting to wash down the sides of the vial to ensure full recovery of the protein into solution. <b>Do not vortex.</b> Allow a few minutes for complete solubilization.		
<b>Storage &amp; Stability:</b>	Lyophilized vial is shipped at ambient temperature. Immediately upon receipt, store unopened vial at -20°C (manual defrost freezer) or -80°C for up to 36 months. Upon reconstitution, prepare working aliquots and store at -20°C (manual defrost freezer) or -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage. For short term storage reconstituted material is stable for 4-6 weeks when stored at 2-8°C. <b>Avoid repeated freeze-thaw cycles.</b>		
<b>Applications:</b>	For <i>ex vivo</i> use only. Not for injection or diagnostic procedures. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.		



Country of Origin: USA

SDS-PAGE GMP Grade rhNRG1  
Single Prominent band at ~7.0 kDa



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**