

# Recombinant Human NRG1 $\beta$

Catalog No: CH84

<b>Description</b>	Recombinant Human Neuregulin-1 beta is produced by our E.coli expression system and the target gene encoding Met1-Lys246 is expressed with a 6His tag at the N-terminus.
<b>Source</b>	E. coli
<b>Alternative name</b>	Pro-neuregulin-1;Neuregulin-1 beta 1;NRG1-beta 1;HRG1-beta 1 ECD;EGF;NRG1; GGF; HGL; HRGA; NDF; SMDF;
<b>Accession No.</b>	Q02297-6
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 4mM HCl.
<b>Quality Control</b>	Purity: Greater than 90% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

## Amino Acid Sequence

MGSSHHHHHHSSGLVPRGSHMSERKEGRGKGKGGKKKERGSGKKPESAAGSQSPALPPQLKEMKSQ  
ESAAGSKLVLRCESTSEYSSLRFKWFKNGNELNRKNKPQNIQKKPGKSELRINKASLADSGEYMCKV  
ISKLGNDSASANITIVESNEITGMPASTEGAYVSSSPIRISVSTEGANTSSSTSTTTGTSHLVKCAEKE  
KTFCVNGGECFMVKDLSNPSRYLCKCPNEFTGDRCQNYVMASFYKHL GIEFMEAEELYQK

## 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.

## SDS-Page

