

## 32-7609: Recombinant Human Pro-Neuregulin-1/NGR1- beta 1/HRG1- beta 1 (Ser2-Lys246)

**Gene :** NRG1  
**Gene ID :** 3084  
**Uniprot ID :** Q02297

### Description

Source: E.coli.  
MW :26.9kD.

Recombinant Human Neuregulin-1 beta is produced by our E.coli expression system and the target gene encoding Ser2-Lys246 is expressed. 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 4mM HCl.  
**Storage condition :** 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 :** MSERKEGRGKGKGKKKERGSGKPPESAAGSQSPALPPQLKEMKQESAAGSKLVLCETSSEYSSLRFKWFKN  
GNELNRKNKPQNIKIQKKPGKSELINKASLADSGEYMCKVISKLGNDSASANITIVESNEIITGMPASTEGAYVS  
SESPIRISVSTEGANTSSSTSTTTGTSHLVKCAEKEKTFVNGGECFMVKDLSNPSRYLCKCPNEFTGDRCQNY  
VMASFYKHLGIEFMEAEELYQK

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.