Rev. 0

ScienCell™ Research Laboratories

Recombinant Human NRG-1 (EGF-like domain) Beta 2 (rhNRG-1b2)

Catalog #107-10b2

Product Description

Neuregulin-1 (NRG-1) is an EGF family growth factor involved in the regulation of cell growth, differentiation, and tissue homeostasis through activation of ErbB receptor signaling. The β2 isoform contains a distinct EGF-like domain sequence that binds ErbB3 and ErbB4 receptors, leading to receptor heterodimerization with ErbB2 and activation of multiple intracellular signaling cascades.

NRG-1 β2 contributes to cardiac and nervous system development by regulating ErbB receptor phosphorylation and downstream signaling. It supports cardiomyocyte survival and structural organization and has been utilized in studies investigating cardiac repair, neuronal function, stem cell differentiation, and regenerative medicine. The β2 isoform provides researchers with an additional NRG-1 variant for investigating isoform-specific ErbB signaling and biological responses.

Specifications

Synonyms:	NRG1-β2, HRGβ2, Heregulin β2, GGF2, ARIA, HGL, HRG, HRGA, MST131, NDF
AA Sequence:	SHLVKCAEKE KTFCVNGGEC FMVKDLSNPS RYLCKCPNEF TGDRCQNYVM ASFYKAEELY Q
Source:	*E. coli*
Molecular Weight:	7.0 kDa

Quality Control

Purity	> 95%
Physical Appearance:	White lyophilized powder.
Endotoxin:	<0.1 ng/μg of protein (<1 EU/μg)

Formulation

Lyophilized from a 0.2μm filtered concentrated solution in 20 mM Tris-HCl pH7.5 and 300 mM NaCl with dextran as protectant.

Reconstitution

Reconstitute in sterile distilled water or 1x PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Rev. 0

Shipping and Storage

Gel pack. Upon receipt, store at -20ºC after receiving. Upon reconstitution, store at 2-8ºC for up to one week. For maximal stability, aliquot and store at -20ºC. Avoid repeated freeze/ thaw cycles.

Usage

rhNRG-1b2 is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.