

Datasheet for 009-001-W05-0010

## rHuman Neuregulin 1Beta Protein

### Overview

<b>Description:</b>	Human Neuregulin 1-beta Recombinant Protein - 009-001-W05-0010
<b>Item No.:</b>	009-001-W05-0010
<b>Size:</b>	10 µg
<b>Applications:</b>	SDS-PAGE
<b>Origin:</b>	Human
<b>Expressed in:</b>	E. coli

### Product Details

<b>Background:</b>	Neuregulin 1-beta (NRG1) is one of many isoforms of NRG that contains a soluble EGF-like domain. Alpha and beta variants are distinguished by difference in length at the C terminus. The EGF-like domain signals through receptors ErbB2, ErbB3, and ErbB4 to act as a growth factor. NRG isoforms are particularly important for nervous system and cardiovascular development. Recombinant human NRG1-beta is a non-glycosylated protein, containing 66 amino acids, with a molecular weight of 7.6 kDa.
<b>Synonyms:</b>	Acetylcholine receptor-inducing activity (ARIA), Breast cancer cell differentiation factor p45, Glial growth factor, Heregulin, Neu differentiation factor, NGR beta 1, heregulin, HRG1 beta, Sensory and motor neuron-derived factor
<b>Species of Origin:</b>	Human
<b>Expressed in:</b>	E. coli
<b>Type:</b>	Recombinant Protein
<b>Low Endotoxin:</b>	Yes

### Target Details

<b>Gene Name:</b>	NRG1
<b>Purity/Specificity:</b>	Neuregulin 1-beta purity was determined to be greater than 95% as determined by reducing and non-reducing SDS-pAGE.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q02297</a></li></ul>

## Application Details

<b>Tested Applications:</b>	SDS-PAGE
<b>Application Note:</b>	Neuregulin 1-beta Recombinant Protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-Neuregulin 1-beta in immunological assays.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>Other:</b>	Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein. Biologic Activity: The activity is determined by the ability to stimulate proliferation of MC-7 cells under serum free conditions and is typically less than 0.3 ng/mL.

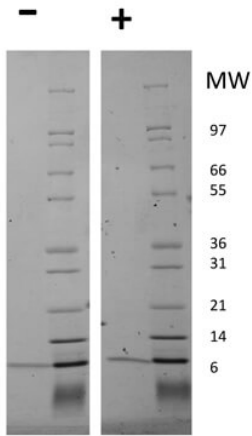
## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	0.1mg/ml
<b>Buffer:</b>	0.1% Trifluoroacetic acid
<b>Preservative:</b>	None
<b>Stabilizer:</b>	None
<b>Reconstitution Volume:</b>	10 $\mu$ l (10-100 $\mu$ l)
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
<b>Expiration:</b>	Expiration date is six (6) months from date of receipt.

## Images



#### SDS-PAGE

SDS-PAGE of Human Neuregulin 1-beta Recombinant Protein. Lane 1: 1  $\mu$ g Human NRG1-beta in non-reducing conditions (-). Lane 2: Molecular weight marker. Lane 3: 1  $\mu$ g Human NRG1-beta in reducing conditions (+). Lane 4: Molecular weight marker. Human NRG1-beta has a predicted MW of 7.6 kDa.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.