

Datasheet for 009-001-W07-0100**rHuman Neurotrophin-4 Protein****Overview**

Description:	Human Neurotrophin-4 Recombinant Protein - 009-001-W07-0100
Item No.:	009-001-W07-0100
Size:	100 µg
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Neurotrophin-4 (NT-4) is an important member of the nerve growth factor (NGF) family of proteins along with NT-3, BDNF and NGF. Neurotrophins act in a paracrine and/or autocrine manner to control neuronal numbers and dendrite outgrowth. These functions are thought to be communicated by TrkB, a receptor tyrosine kinase that NT-4 shares with BDNF. Recombinant human NT-4 is a non-glycosylated, non-covalently linked homodimer, containing two 131 amino acid chains, with a total molecular weight of 28.1 kDa.
Synonyms:	Neurotrophin 5 (NT-5), Neurotrophic Factor 4
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	NTF4
Purity/Specificity:	Neurotrophin-4 purity was determined to be greater than 97% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	UniProtKB - P34130

Application Details

Application Note:	Neurotrophin-4 Recombinant Protein is suitable as a control for polyclonal or monoclonal anti-Neurotrophin-4 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: Proliferation of a neuroblastoma cell line stably expressing TrkB (BR6) ED50 ≤ 20 ng/mL ($\geq 5.0 \times 10^4$ units/mg).

Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	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.
Expiration:	Expiration date is six (6) months from date of receipt.

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.

