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Datasheet for 012-001-V10-0100

rRat Glial Derived NTF Protein

Overview

Description:	Rat Glial Derived Neurotrophic Factor Recombinant Protein - 012-001-V10-0100
Item No.:	012-001-V10-0100
Size:	100 µg
Applications:	Cellular Assay
Origin:	Rat
Expressed in:	E. coli

Product Details

Background:	Glial Cell Line-Derived Neurotrophic Factor (GDNF) is a neurotrophic factor that is closely related to other neurotrophic factors, such as Neurturin, Persephin, and Artemin, by a common structural feature called the cysteine-knot. GDNF signals through a multicomponent system of receptors that includes RET and GFRα1-4, to promote dopamine uptake, survival and differentiation of neurons. Recombinant rat GDNF is a non-glycosylated homodimer, containing two 135 amino acid chains, with a total molecular weight of 30.1 kDa.
Synonyms:	ATF-1
Species of Origin:	Rat
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Gdnf
Purity/Specificity:	Glial Derived Neurotrophic Factor purity was determined to be greater than 98% as determined by analysis by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - Q07731

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Glial Derived Neurotrophic Factor Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Glial Derived Neurotrophic Factor 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/µg protein. Biologic Activity: The activity is determined by the dose-dependent proliferation of C6 cells and is typically less than 0.1 µg/mL.

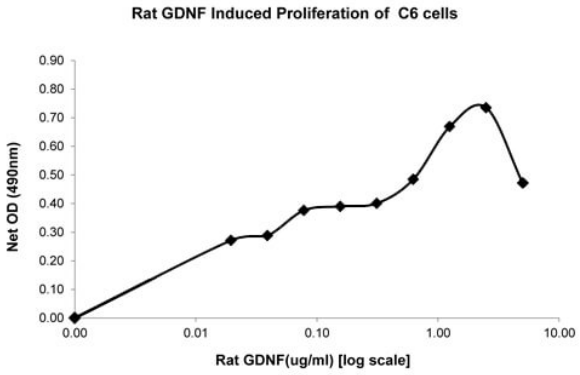
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 µL
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.

Images



SDS-PAGE

Bioactivity of Rat Glial Derived Neurotrophic Factor Recombinant Protein. C6 cells were cultured with 0 to 5 ug/mL Rat GDNF. Cell proliferation was measured after 7 days and the linear portion of the curve was us used to calculate the ED50. The ED50 of Rat GDNF is 0.05-0.08 ug/mL.

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.