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Datasheet for 012-001-W31-0005

rRat TNF alpha Protein

Overview

Description:	Rat Tumor Necrosis Factor alpha Recombinant Protein - 012-001-W31-0005
Item No.:	012-001-W31-0005
Size:	5 µg
Applications:	SDS-PAGE
Origin:	Rat
Expressed in:	E. coli

Product Details

Background:	Tumor Necrosis Factor alpha (TNFα) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, NK-cells following their stimulation by bacterial LPS. TNFα activates signals through two receptors, TNF-R1, which is expressed on most cell types, and TNF-R2, which is expressed mainly on immune cells. TNFα can have many functions including, to stimulate of phagocytosis in macrophages, to chemoattract neutrophils, to increase insulin resistance and to induce fever. Recombinant rat TNFα is a non-glycosylated protein, containing 157 amino acids, with a molecular weight of 17.3 kDa.
Synonyms:	TNFSF2, Cachectin, DIF, Necrosin, Cytotoxin, Cachexin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2
Species of Origin:	Rat
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Tnf
Purity/Specificity:	Tumor Necrosis Factor alpha purity was determined to be greater than 95% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P16599

Application Details

Tested Applications:	SDS-PAGE
Application Note:	Tumor Necrosis Factor alpha Recombinant Protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-Tumor Necrosis Factor alpha in immunological assays. Lyophilized in 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5.
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 cytolysis of mouse L929 cells in the presence of Actinomycin D and is typically less than 0.05 ng/mL.

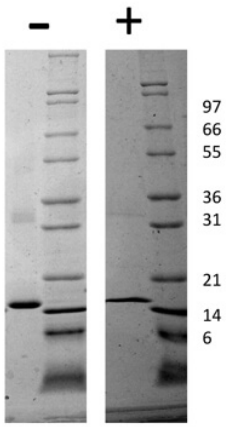
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	5µl (5-50µl)
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

SDS-PAGE of Rat Tumor Necrosis Factor alpha Recombinant Protein. Lane 1: 1 µg Rat TNF-alpha AF in non-reducing conditions (-). Lane 2: Molecular weight marker. Lane 3: 1 µg Rat TNF-alpha AF in reducing conditions (+). Lane 4: Molecular weight marker. Rat TNF-alpha has a predicted MW of 17.3 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.