

Datasheet for 009-F01-B92-0002**rHuman IL-3 Protein****Overview**

Description:	Human Interleukin-3 Recombinant Protein (Animal Free) - 009-F01-B92-0002
Item No.:	009-F01-B92-0002
Size:	2 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Interleukin-3 (IL-3) is a cytokine produced by activated T cells and mast cells. IL-3 is able to induce the differentiation of hematopoietic stem cells to precursor cells of myeloid lineage (erythrocytes, megakaryocytes, granulocytes, dendritic cells and monocytes). IL-3 also has functions in the nervous system and appears to be important in several chronic inflammatory diseases. Recombinant human IL-3 is a non-glycosylated protein, containing 133 amino acids, with a molecular weight of 15 kDa.
Synonyms:	Mast cell growth factor (MCGF), Multipotential colony-stimulating factor, Multi-CSF, Hematopoietic growth factor, HCGF, P-cell stimulation factor
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	IL3
Purity/Specificity:	Interleukin-3 is produced with no animal-derived raw products, animal free equipment and animal free protocols. 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 - P08700

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Human Interleukin-3 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Human Interleukin-3 in immunological assays. Buffer formation: 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/ μ g protein. Biologic Activity: The activity is determined by the dose-dependent stimulation of TF-1 cells and is typically less than 2 ng/mL.

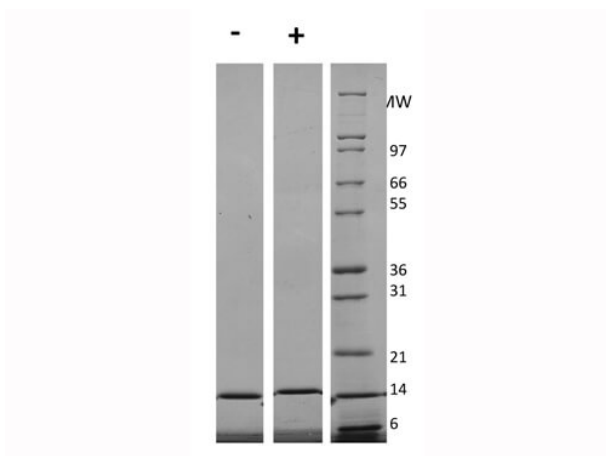
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	2 μ l (2-20 μ l)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

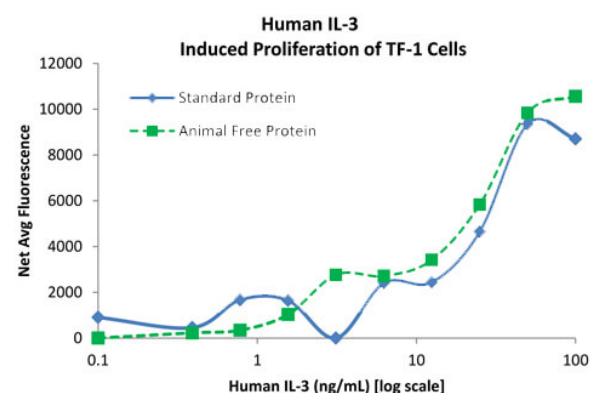
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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.

Images



SDS-PAGE

SDS-PAGE of Human Interleukin-3 Animal Free Recombinant Protein. Lane 1: 1 μ g Human IL-3 AF in non-reducing conditions (-). Lane 2: 1 μ g Human IL-3 AF in reducing conditions (+). Lane 3: Molecular weight marker. Human IL-3 AF has a predicted MW of 15 kDa.



SDS-PAGE

Bioactivity of Human Interleukin-3 AF Recombinant Protein. TF-1 cells were cultured with 0 to 100 ng/mL Human IL-3. Cell proliferation was measured after 72 hours and the linear portion of the curve was used to calculate the ED₅₀. The ED₅₀ of Human IL-3 AF is 12.4-18.6 ng/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.