

Datasheet for 009-001-310**rHuman IL-6 Protein****Overview**

Description:	IL-6 Human Recombinant Protein - 009-001-310
Item No.:	009-001-310
Size:	20 µg
Applications:	SDS-PAGE
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Cytokines of the IL6/GCSF/MGF family are glycoproteins of about 170 to 180 amino acid residues that contains four conserved cysteine residues involved in two disulfide bonds. They have a compact, globular fold (similar to other interleukins), stabilized by the 2 disulfide bonds. One half of the structure is dominated by a 4 alpha-helix bundle with a left-handed twist: the helices are anti-parallel, with 2 overhand connections, which fall into a 2-stranded anti-parallel beta-sheet. The fourth alpha-helix is important to the biological activity of the molecule. Interleukin (IL)-6 is an important proinflammatory and immunoregulatory cytokine expressed by various cells. Interleukin-6 has been shown to inhibit the growth of early stage and to promote the proliferation of advanced stage melanoma cells in vitro. Recombinant Human IL-6 produced in E.coli is a single, non-glycosylated polypeptide chain containing 184 amino acids and having a molecular mass of 21,000 Daltons.
Synonyms:	Interleukin-6 cytokine, IL-6, B-cell stimulatory factor 2, BSF-2, Interferon beta-2, IFN-beta-2, Hybridoma growth factor, CTL differentiation factor, CDF, Interleukin HP-1
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	IL6
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Purity/Specificity:	Purity greater than 95% as determined by analysis of RP-HPLC and reducing and non-reducing SDS-PAGE against a known standard.
Relevant Links:	• NCBI • UniProtKB - P05231

Application Details

Tested Applications:	SDS-PAGE
Application Note:	For easiest restoration, it is recommended to restore with 0.2 ml of sterile water for a stock concentration of 0.1 mg/ml. Interleukin-6 (IL-6) protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-Interleukin-6 (IL-6) in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Biological Activity: IL-6 activity is determined by the dose-dependant stimulation of mouse B9 cells and is typically less than 1 ng/mL. Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein.

Formulation

Physical State:	Lyophilized
Concentration:	0.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	200 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

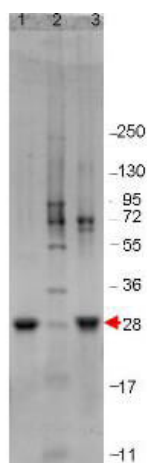
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at -20° 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 using Rockland's Recombinant Human IL-6 Protein shows bands corresponding to IL-6 (1µg) in lane 1 (unreduced, arrowhead) and lane 3 (reduced). Molecular weight estimation was made by comparison to prestained MW markers, lane 2.

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.