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Datasheet for 012-001-310-0002

rRat IL-6 Protein

Overview

Description:	Rat Interleukin-6 Recombinant Protein - 012-001-310-0002
Item No.:	012-001-310-0002
Size:	2 µg
Applications:	Cellular Assay
Origin:	Rat

Product Details

Background:	Interleukin 6 (IL-6) is an important pro-inflammatory and anti-inflammatory cytokine expressed by T cells, macrophages and muscle cells. IL-6 signals through a receptor complex containing two receptors, IL-6Rα and gp130. IL-6 has an important function in promoting fever and can serve to stimulate an immune response to trauma. IL-6 is often used for growth of hybridoma cell lines. Human IL-6 is active on mouse and rat cells. Recombinant rat IL-6 is a non-glycosylated protein, containing 188 amino acids, with a molecular weight of 21.8 kDa.
Synonyms:	Interferon beta-2 (IFN-β2), B-cell Differentiation Factor (BSF-2), HSF, MGI-2
Species of Origin:	Rat
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Il6
Purity/Specificity:	Interleukin-6 purity was determined to be greater than 90% as determined by HpLC, analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P20607

Application Details

Suggested Applications:	Cellular Assay (Based on references)

Application Note:	Interleukin-6 Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-6 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 a dose-dependent stimulation of mouse 7TD1 cells and is typically less than 0.01 ng/mL.

Formulation

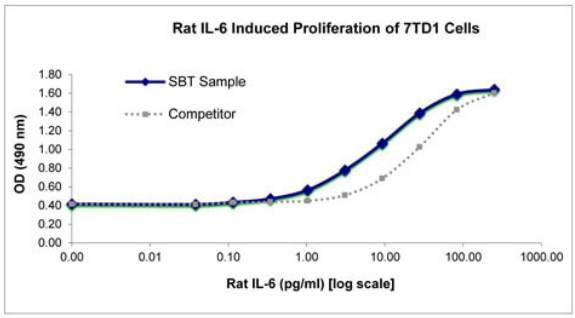
Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	mannitol
Reconstitution Volume:	2µl (2-20µl)
Reconstitution Buffer:	0.01M HCl

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

Rat IL-6 Bioactivity Data



SDS-PAGE

Bioactivity of Rat Interleukin-6 Recombinant Protein. 7TD1 cells were cultured with 0 to 250 pg/mL Rat IL-6. Cell proliferation was measured after 66 hours and the linear portion of the curve was us used to calculate the ED50. The ED50 of Rat IL-6 is 5.9-8.9 pg/mL. This value is comparable to expected range of less than 20 pg/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.