

## Datasheet for 012-001-310-0002

**rRat IL-6 Protein****Overview**

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

**Product Details**

<b>Background:</b>	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-6R $\alpha$ 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.
<b>Synonyms:</b>	Interferon beta-2 (IFN- $\beta$ 2), B-cell Differentiation Factor (BSF-2), HSF, MGI-2
<b>Species of Origin:</b>	Rat
<b>Type:</b>	Recombinant Protein
<b>Low Endotoxin:</b>	Yes

**Target Details**

<b>Gene Name:</b>	IL6
<b>Purity/Specificity:</b>	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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P20607</a></li></ul>

**Application Details**

<b>Suggested Applications:</b>	Cellular Assay (Based on references)
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<b>Application Note:</b>	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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>Other:</b>	Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g 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

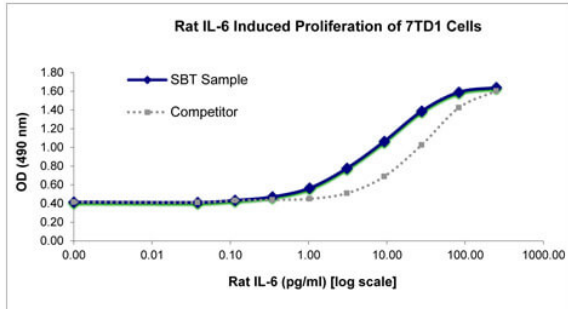
<b>Physical State:</b>	Lyophilized
<b>Buffer:</b>	0.1% Trifluoroacetic acid
<b>Preservative:</b>	None
<b>Stabilizer:</b>	mannitol
<b>Reconstitution Volume:</b>	2 $\mu$ l (2-20 $\mu$ l)
<b>Reconstitution Buffer:</b>	0.01M HCl

## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	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.
<b>Expiration:</b>	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 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

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