

## Recombinant Rat IL-6/Interleukin-6 Protein

Catalog No. PKSR030420

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

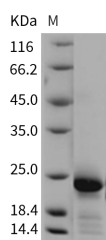
### Description

<b>Synonyms</b>	IL6
<b>Species</b>	Rat
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Phe25-Thr211
<b>Accession</b>	NP_036721.1
<b>Calculated Molecular Weight</b>	21.9 kDa
<b>Observed molecular weight</b>	22 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Measured in a cell proliferation assay using T1165 mouse plasmacytoma cells. The ED50 for this effect is typically 1-6 ng/ml.

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 40% acetonitrile, 0.1% TFA Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

Interleukin-6 (IL-6) is a multifunctional  $\alpha$ -helical cytokine that regulates cell growth and differentiation of various tissues,

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which is known particularly for its role in the immune response and acute phase reactions. IL-6 protein is secreted by a variety of cell types including T cells and macrophages as phosphorylated and variably glycosylated molecule. It exerts actions through its heterodimeric receptor composed of IL-6R that lacks the tyrosine/kinase domain and binds IL-6 with low affinity, and ubiquitously expressed glycoprotein 130 (gp130) that binds the IL-6. IL-6R complex with high affinity and thus transduces signals. IL-6 is also involved in hematopoiesis, bone metabolism, and cancer progression, and has been defined an essential role in directing transition from innate to acquired immunity.