

Rev03  
Update: Dec,14,2021

**DATASHEET**

# IL-6, Rat (HEK 293-expressed)

Cat. No.: Z03041

## Product Introduction

<b>Species</b>	Rat
<b>Protein Construction</b>	<b>IL-6 (Phe25-Thr211) Accession # P20607-1</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 3.0 $\mu$ g/ml, measured by a cell proliferation assay using 7TD1 Cells.
<b>Expression System</b>	HEK 293
<b>Apparent Molecular Weight</b>	21~26 kDa , on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** Interleukin-6 (IL-6), also known as BSF-2, CDF and IFNB2, is a pleiotropic cytokine that participates in both pro-inflammatory and anti-inflammatory responses. It is produced mainly by T cells, macrophages, monocytes, endothelial cells and muscle cells. IL-6 binds to IL-6 receptor (IL-6R) to trigger the association of IL-6R with gp130, inducing signal transduction through JAKs and STATs. The biological functions of IL-6 are diverse. It stimulates B cell differentiation and antibody production, myeloma and plasmacytoma growth, and nerve cell differentiation. It also acts as a myokine, produced by muscle cells in response to muscle contraction and released into the blood stream to help break down fats and improve insulin resistance.

**Synonyms :** IL6; 26 kDa protein; IFN- $\beta$ 2; IFN-b2; B cell differentiation factor; BCDF; BSF-2; HPGF; HSF; MGI-2

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.