

Technical Data Sheet

Recombinant Rat IL-6

Product Information

Material Number:	557008
Size:	5 µg
Concentration:	0.1 mg/ml
Reactivity:	QC Testing: Rat
Storage Buffer:	Frozen aqueous buffered solution containing BSA and glycerol.

Description

Interleukin-6 (IL-6, aka IFN-β2, BSF-2, and HPGF) is a multifunctional cytokine which regulates immune responses, acute-phase reactions and hematopoiesis. Reported cellular targets for IL-6 action are hepatocytes, B and T lymphocytes, neurons, tumor cells and multi-potent hematopoietic cells. Recombinant rat IL-6 (Cat. No. 557008) is supplied as a frozen liquid comprised of 0.22 µm sterile-filtered aqueous buffered solution, glycerol and bovine serum albumin, with no preservatives. Recombinant rat IL-6 is ≥ 95% pure as determined by SDS-PAGE and an absorbance assay based on the Beers-Lambert law. The endotoxin level is ≤ 0.1 ng per µg of rat IL-6, as measured in a chromogenic LAL assay.

Preparation and Storage

Store product at -80°C prior to use or for long term storage of stock solutions.
Rapidly thaw and quick-spin product prior to use.
Avoid multiple freeze-thaws of product.
This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

ELISA Standard	Routinely Tested
Bioassay	Tested During Development

Recommended Assay Procedure:

Upon initial thawing, recombinant rat IL-6 (Cat. No. 557008) should be aliquoted into polypropylene microtubes and frozen at -80°C for future use. Alternatively, the product can be diluted in sterile neutral buffer containing not less than 0.5 – 1.0 mg/mL carrier protein, such as human or bovine serum albumin, aliquoted and stored at -80°C. Failure to add carrier protein or store at the indicated temperatures may result in a loss of activity. Carrier proteins should be pre-screened for possible effects in an appropriate experimental system. Carrier proteins may have an undesired influence on experimental results due to toxicity, high endotoxin levels or possible blocking activity.

ELISA Standard: Rat IL-6 is useful as a quantitative standard for measuring rat IL-6 protein levels in a IL-6 specific sandwich ELISA, with the purified C3-4 antibody (Cat. No. 550644) as a capture antibody and the biotinylated G307-2 antibody (Cat. No. 550642) as the detection antibody. This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems, not for assay of serum or plasma samples. For measuring rat IL-6 in serum or plasma, the BD OptEIA™ Rat IL-6 Set (Cat. No. 550319) is specially formulated and recommended.

Bioassay: Investigators are advised that the Bioassay application is not routinely tested for this material and are highly encouraged to both titrate this material and include appropriate controls in relevant experiments. An activity range of 1.0 - 6.6 x 10⁷ units/mg, encompassing an ED50= 0.15 - 1.0 ng/mL, has previously been reported using NFS-60 indicator cells for proliferation, with a unit defined as the amount of material needed to stimulate a half-maximal response at cytokine saturation.

Suggested Companion Products

Catalog Number	Name	Size	Clone
550644	Purified Mouse Anti-Rat IL-6	0.5 mg	C3-4
550642	Biotin Mouse Anti-Rat IL-6	0.5 mg	G307-2
550319	Rat IL-6 ELISA Set	20 Plate(s)	(none)
555214	TMB Substrate Reagent Set	1 Each	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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