

Technical Data Sheet

Recombinant human IL-6 protein



bioxcell.com

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

Lot Specific Information

Lot Number: Lot Specific*

Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Shelf Life

This product has a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended.

Product Website Link: <https://bioxcell.com/recombinant-human-il-6-protein-rp028>

Product Information

Catalog Number:	RP028
Protein Identity:	Confirmed identity with expected mass, determined by mass spectrometry
Formulation:	Lyophilized, white powder
Endotoxin:	≤0.5 EU/mg, LAL assay
Purity:	≥95%; SDS-PAGE
Reconstitution:	Resuspend in sterile-filtered water at >50 µg/ml. Once reconstituted, store in single-use aliquots to avoid freeze-thaw cycles. Store reconstituted protein at -20 °C to -80 °C for a maximum of 12 months or until the expiry date if sooner.
Sterility:	Sterile
Production:	Microbial. Expressed in E. coli
Molecular Weight:	20.9 kDa (monomer)
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human IL-6 protein (interleukin-6) is a multifunctional, pleiotropic cytokine that regulates immune responses, inflammation and diverse physiological processes and is produced by T cells, B cells, monocytes, fibroblasts, endothelial cells and adipocytes. Adopting a glycosylated four-helix-bundle structure, IL-6 binds the IL-6 receptor (IL-6R) and forms a hexameric complex with gp130 to initiate JAK/STAT signaling. IL-6 is a central driver of the acute-phase response, stimulating production of C-reactive protein, fibrinogen and serum amyloid A; it promotes differentiation of B cells into antibody-producing plasma cells, T-cell proliferation and activation, and immune cell recruitment, and it influences metabolism, energy balance and glucose and lipid handling with both pro- and anti-inflammatory effects. Because dysregulated IL-6 signaling underlies rheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel disease and cancer, recombinant IL-6 is a key reagent for immunology, inflammation and disease-modeling research. This protein is optimized for in vivo and functional applications: low-endotoxin, tag-free, and carrier-free, supporting reproducible performance in demanding preclinical and bioactivity studies. Species reactivity: human. Species similarity: mouse - 39%, rat - 38%, bovine - 50%, porcine - 58%.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Store lyophilized protein between -20 °C and -80 °C until the date of expiry. Avoid freeze-thaw cycles

Bio X Cell, LLC

Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.

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