

Recombinant Rhesus Macaque Interleukin-6

#R00204

Size: 10 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-6 (IL-6) is an interleukin that is encoded by the IL-6 gene and acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response. Furthermore, It plays an essential role in the final differentiation of B-cells into Ig-secreting cells involved in lymphocyte and monocyte differentiation. It also induces myeloma and plasmacytoma growth and induces nerve cells differentiation acts on B-cells, T-cells, hepatocytes, hematopoietic progenitor cells and cells of the CNS. The rhesus macaque IL-6 contains 186 amino acids and it signals through a cell-surface type I cytokine receptor complex consisting of the ligand-binding IL-6Rα chain (CD126), and the signal-transducing component gp130 (also called CD130).

AA Sequence

MAPVLPGEDSKNVAAPHSQPLTSSERIDKHIRYILDGI

SALRKETCNRSNMCESSKEALAENNLNLPKMAEKDG
CFQSGFNEDTCLVKIITGLLEFEVYLEYLQNRFESSEE
QARAVQMSTKVLIQFLQKKAKNLDAITTPPTTNASLL
TKLQAQNQWLQDMTTHLILRSFKEFLQSNLRALRQM

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Species	Rhesus
Source	Escherichia coli.
Molecular Weight	Approximately 21.1 kDa, a single non-glycosylated polypeptide chain containing 186 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using IL-6-dependent murine 7TD1 cells is less than 0.1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁷ IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 50 mM Tris-HCl, pH9.0, 600 mM NaCl, with 0.02 % Tween-20.
Endotoxin	Less than 1 EU/µg of rRhIL-6 as determined by LAL method.