PrimeGene a biotechne brand

Recombinant Murine Interleukin-6 (rMuIL-6)

PrimeGene Technical Data Sheet

Catalog Number:	121-06
Source:	Escherichia coli.
Molecular Weight:	Approximately 21.7 kDa, a single non-glycosylated polypeptide chain containing 188 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	MFPTSQVRRG DFTEDTTPNR PVYTTSQVGG LITHVLWEIV EMRKELCNGN
	SDCMNNDDAL AENNLKLPEI QRNDGCYQTG YNQEICLLKI SSGLLEYHSY
	LEYMKNNLKD NKKDKARVLQ RDTETLIHIF NQEVKDLHKI VLPTPISNAL
	LTDKLESQKE WLRTKTIQFI LKSLEEFLKV TLRSTRQT
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by the dose-dependent
	stimulation of the proliferation of IL-6-dependent murine 7TD1 cells is less than 0.02 ng/ml,
	corresponding to a specific activity of $> 5 \times 10^7$ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in 30 mM Acetic Acid, pH 3.0, 150 mM NaCl, 5 %
	Trehalose, 0.02 % Tween-20.
Endotoxin:	Less than 1 EU/µg of rMuIL-6 as determined by LAL method.
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 mg/mL . Stock solutions should be apportioned into working aliquots and stored
	at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

Murine Interleukin-6

Interleukin-6 (IL-6) encoded by the IL-6 gene, acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response. 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 mouse IL-6 is a single non-glycosylated polypeptide chain containing 187 amino acids and it signals through a cell-surface type I cytokine receptor complex consisting of the ligand-binding IL-6R α chain (CD126), and the signal- transducing component gp130 (also called CD130). The mouse IL-6 shares 40 % and 85 % a.a. sequence identity with human and rat IL-6 and it is equally active on human and rat cells.

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