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# Interleukin-6

# Recombinant Mouse Interleukin-6 (rmIL-6)

 Catalog#:
 BX1006-20:
 20μg

 BX1006-200:
 200μg

 BX1006-1000:
 1.0mq

Lot#: On vial label

Formulation: Lyophilized powder lyophilized from a volatile buffer

(50 mM NH<sub>4</sub>HCO<sub>3</sub>, pH 8.0).

**Preservative:** None. **MW:** 22 kD

**Purity:** >97% on 15% SDS-PAGE.

**Source:** Recombinant mature protein expressed in *E. coli* (189

amino acid residues).

Sterility: 0.2 µm membrane-filtered and packaged aseptically.

**ED50:** ND **Endotoxin\*:** ≤0.1 EU/μg **QC Tests:** SDS-PAGE

### Reconstitution and Use:

Reconstitute the contents of the vial using phosphate buffer (pH6.0) at a concentration no less than 100 µg/ml. Dilute the stock solution with sterile phosphate-buffered saline (PBS) to a working aliquot for future use. (If the initial rehydration is too dilute, activity may be lost due to the non-specific adsorption to the container). The solution can then be further diluted to a working stock solution.

If the product is going to be used for applications requiring absolute asepsis, it's best to filter-sterilize the solution using a sterile and non-pyrogenic 0.2  $\mu m$  membrane before use.

# Storage and Stability:

Upon receiving, store the product at  $-20~^{\circ}$ C. After reconstitution, store the working aliquots at 2-8  $^{\circ}$ C for no more than 3 months. For extended storage, aliquot the rehydrated solution ( $\geq 100~\mu g/ml$ ) and freeze at  $-70~^{\circ}$ C or  $-20~^{\circ}$ C. Avoid repeated freezing and thawing. More dilute solutions stored at  $-20~^{\circ}$ C will lose activity faster.

#### \*\*Endotoxin Assay:

Endotoxin Unit (EU) is determined by Limulus Amebocyte Lysate (LAL) assay (Sigma).

## About Interleukin-6

Interleukin-6 (IL-6) is a pro-inflammatory cytokine that also has an important role in immunity. IL-6 induces growth and terminal differentiation of B cells; secretion of immunoglobulins; differentiation and activation of T cells and macrophages; and the induction of acute-phase response proteins. Many types of cells, including macrophages, T cells, fibroblasts, and endothelial cells, produce IL-6 in response to stimuli such as bacteria, viruses, and other cytokines, particularly IL-1 and tumor necrosis factor, alpha (TNF). Human IL-6 is active on both mouse and rat cells, while mouse IL-6 has no activity on human cells. Recombinant mouse IL-6 is a 22 kDa protein containing 189 amino acid residues

### **Recombinant Amino Acid Sequence:**

MAFPTSQVRR	GDFTEDTTPN	RPVYTTSQVG	GLITHVLWEI
VEMRKELCNG	NSDCMNNDDA	LAENNLKLPE	IQRNDGCYQT
GYNQEICLLK	ISSGLLEYHS	YLEYMKNNLK	DNKKDKARVL
QRDTETLIHI	FNQEVKDLHK	IVLPTPISNA	LLTDKLESQK
EWLRTKTIOF	ILKSLEEFLK	VTLRSTROT	

## **Further Readings:**

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Akira, S. et al. (1993) Adv. Immunol. 54:1.

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