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Recombinant Murine Interleukin-6

Alternate names: BSF-2, BSF2, CDF, HGF, HSF, IFNB2, IL6, Interferon beta-2, Interleukin 6, MGI-2A

Catalog No.: PA1080XC

Quantity: 1 mg

Concentration: 1 mg/ml

Background: Interleukin-6 is a potent pro-inflammatory cytokine primarily produced by activated T cells and an assortment of other cells including endothelial cells and macrophages. IL-6 affects B and T lymphocytes and has been shown to have a role in host defense, acute phase reactions, immune responses and hematopoiesis.

Species: Mouse

Source: E. coli

Format: **State:** Sterile Filtered White lyophilized (freeze-dried) powder.
Purity: ›98% Greater than 97.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.
Buffer System: The protein was lyophilized from a concentrated solution containing 50mM NH4HCO3, pH 8.0.
Reconstitution: It is recommended to reconstitute the lyophilized Interleukin 6 in 100 mM acetic acid to 0.1-1.0 mg/mL to regain full activity, and can then be further diluted to other aqueous solutions.

Description: Interleukin-6 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 187 amino acids. The IL-6 is purified by proprietary chromatographic techniques.
AA Sequence:
`The sequence of the first five N-terminal amino acids was determined and was found to be Met-Phe-Pro-Thr-Ser.`
Biological Activity: The ED50 as determined by the dose-dependant stimulation of murine 7TD1 cells is less then 0.02 ng/ml, corresponding to a Specific Activity of 1 x 10 7IU/mg.
Molecular weight: 22 kDa 21709 Dalton.

Storage: Lyophilized Interleukin-6 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-6 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.

General Readings: 1. Kim TW, Chung BH, Chang YK. Production of soluble human interleukin-6 in cytoplasm by fed-batch culture of recombinant E. coli. Biotechnol Prog. 2005 Mar-Apr;21(2):524-31. PubMed PMID: 15801793.
2. Hiscock N, Fischer CP, Sacchetti M, van Hall G, Febbraio MA, Pedersen BK. Recombinant human interleukin-6 infusion during low-intensity exercise does not enhance whole body

lipolysis or fat oxidation in humans. Am J Physiol Endocrinol Metab. 2005 Jul;289(1):E2-7. Epub 2005 Mar 1. PubMed PMID: 15741245.
3. Meads MB, Medveczky PG. Kaposi's sarcoma-associated herpesvirus-encoded viral interleukin-6 is secreted and modified differently than human interleukin-6: evidence for a unique autocrine signaling mechanism. J Biol Chem. 2004 Dec 10;279(50):51793-803. Epub 2004 Jul 16. PubMed PMID: 15258150.
4. Saha A, Bairwa NK, Ranjan A, Gupta V, Bamezai R. Two novel somatic mutations in the human interleukin 6 promoter region in a patient with sporadic breast cancer. Eur J Immunogenet. 2003 Dec;30(6):397-400. PubMed PMID: 14675392.
5. Matthews V, Schuster B, Schütze S, Bussmeyer I, Ludwig A, Hundhausen C, et al. Cellular cholesterol depletion triggers shedding of the human interleukin-6 receptor by ADAM10 and ADAM17 (TACE). J Biol Chem. 2003 Oct 3;278(40):38829-39. Epub 2003 Jun 27. PubMed PMID: 12832423.
6. Li Y, Reichenstein K, Ullrich R, Danner T, von Specht BU, Hahn HP. Effect of in situ expression of human interleukin-6 on antibody responses against Salmonella typhimurium antigens. FEMS Immunol Med Microbiol. 2003 Jul 15;37(2-3):135-45. PubMed PMID: 12832117.

Pictures:

Precursor- Protein structure and amino acid sequen