

Recombinant Mouse IL-10

Information

Gene ID	16153		
Accession #	P18893		
Alternate Names	CSIF		
Source	Escherichia coli.		
M.Wt	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 160 amino acids.		
AA Sequence	SRGQYSREDN NCTHFPVGQS HMLLELRTAF SQVKTFFQTK DQLDNILLTD SLMQDFKGYL GCQALSEMIQ FYLVEVMPQA EKHGPEIKEH LNSLGEKLKT LRMRLRRCHR FLPCENKSKA VEQVKSDFNK LQDQGVYKAM NEFDIFINCI EAYMMIKMKS		
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.		
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.		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.		
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 10 mM HCl 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.		
Biological Activity	Fully biologically active when compared to standard. The ED $_{50}$ as determined by a cell proliferation assay using murine MC/9-2 cells is less than 1 ng/ml, corresponding to a specific activity of > 1.0×10^6 IU/mg.		
Shipping Condition	Gel pack.		
Handling	Centrifuge the vial prior to opening.		
Usage	For Research Use Only! Not to be used in humans.		

Components and Storage

Components	10 µg	100 µg	500 µg
Recombinant Mouse IL-10	10 µg	100 µg	500 µg

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Quality Control

Purity	> 97 % by SDS-PAGE and HPLC analyses.	Ballon Educate On St.
Endotoxin	Less than 1 EU/µg of rMulL-10 as determined	by LAL method.

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Description

Interleukin-10 (IL-10) is encoded by the IL10 gene and expressed in monocytes and Type 2 T helper cells (Th2). The biological activities of IL-10 are mediated by the IL-10 receptor complex, which is composed of the ligand-binding IL-10 Rα/R1 and the accessory IL-10 Rβ/R2 subunits. IL-10 is capable of inhibiting the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by T helper cells. IL-10 is classified as a class 2 cytokine which consist of IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26, several interferons and interferon-like molecules. Mature murine IL-10 shares 70 %-77 % amino acid sequence identity with human, bovine, porcine IL-10, but murine IL-10 does not act on human cells.

Reference

- 1. Kim JM, Brannan CI, Copeland NG, et al. 1992. J Immunol. 148:3618-23.
- 2. Tan JC, Braun S, Rong H, et al. 1995. J Biol Chem. 270:12906-11.
- 3. Pestka S, Krause CD, Sarkar D, et al. 2004. Annu Rev Immunol. 22:929-79.
- 4. Vieira P, de Waal-Malefyt R, Dang MN, et al. 1991. Proc Natl Acad Sci U S A. 88:1172-6.
- 5. Hsu DH, de Waal Malefyt R, Fiorentino DF, et al. 1990. Science. 250:830-2.

