

Recombinant Murine Interleukin-10

#R00224

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-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 R α /R1 and the accessory IL-10 R β /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.

AA Sequence

SRGQYSREDNNCTHFPVGGQSHMLLELRTAFSQVKTF

FQTKDQLDNILLTDSLMDKFGYLGCCQALSEMIQFYLV
EVMPQAEKHGPEIKEHLNSLGEKLTLMRLRRCH
RFLPCENKSKAVEQVKSDFNKLQDQGVYKAMNEFDI
FINCIEAYMMIKMKS

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 $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	CSIF
Accession	P18893
GeneID	16153
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 18.7 kDa, a single non-glycosylated polypeptide chain containing 160 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 murine MC/9-2 cells is less than 1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁶ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/μg of rMuL-10 as determined by LAL method.