

**DATASHEET**

Version 20181206

**IL-10, Mouse****Cat. No.:** Z02036-1**Size:** 1.0 mg**Synonyms:** rmIL-10; IL-10**Description:**

Interleukin-10 (IL-10) is produced by murine T-cells following their stimulation by lectins. The main source for B-cell-derived Interleukin-10 (IL-10) in mice is Ly-1 B-cells that express CD5 and CD11. Murine keratinocytes also produce Interleukin-10 (IL-10). In human Interleukin-10 (IL-10) is produced by activated CD8(+) peripheral blood T-cells, by T-helper CD4(+) T-cell clones (resembling Th0, Th1, and Th2) after both antigen-specific and polyclonal activation, by B-cell lymphomas, and by monocytes following cell activation by bacterial lipopolysaccharides and mast cells. B-cells lines derived from patients with acquired immunodeficiency syndrome and Burkitt's lymphoma constitutively secrete large quantities of Interleukin-10 (IL-10) into the conditioned medium. The synthesis of Interleukin-10 (IL-10) by monocytes is inhibited by IL-4 and IL-10. Recombinant mouse Interleukin-10 (IL-10) produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 161 amino acids and having a molecular mass of 18,885 Da.

**Source:** *E. coli***Species:** Mouse

**Biological Activity:** The ED50 as determined by the dose-dependant co-stimulation with murine IL-4 of MC-9 cells was found to be <2 ng/ml, corresponding to a specific activity of  $5 \times 10^5$  IU/mg.

**Molecular Weight:** 18,885 Da.

**Sequence Analysis:** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ser-Arg-Gly-Gln.

**Formulation:** The protein was lyophilized after extensive dialysis against 20mM PB, pH7.3, 300mM NaCl buffer.

**Reconstitution:** It is recommended to reconstitute the lyophilized recombinant mouse Interleukin-10 (IL-10) in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.

**Purity:** Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

**Endotoxin Level:** Less than 0.1 ng/ug (1 EU/ug) of recombinant mouse Interleukin-10 (IL-10) as determined by LAL test.

**Storage:** Lyophilized Mouse Interleukin-10 (IL-10) remains stable at room temperature for three weeks, but it is best stored desiccated below -18°C. Upon reconstitution Mouse Interleukin-10 (IL-10) should be stored at 4°C for up to seven days. For long term storage it is recommended that a carrier protein (0.1% HSA or BSA ) be added. Avoid repeated freeze-thaw cycles.