

## Recombinant Murine Interleukin-10 (rm IL-10)

**Synonyms :** Cytokine synthesis inhibitory factor (CSIF), B-TCGF, TGIF, IL10A

**Introduction :** IL10 is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation and antibody production. This cytokine can block NF-kappa B activity and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

**Description:** Recombinant murine IL-10 produced in *E.Coli* is a single, glycosylated polypeptide chain containing 161 amino acids and having a molecular mass of 18.8 kDa. The rm IL-10 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.22 µm filtered solution in TRIS, pH 8.0 + 250 mM NaCl. The aliquots of 1 µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm IL-10 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm IL-10 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm IL-10 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.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Amino Acid Sequence:** MSRGQYSRED NNCTHFPVGG SHMLLELRTA FSQVKTFQKTD KDQLDNILLT DSLMQDFKGY LGCQALSEMI QFYLVVEVMPQ AEKHGPEIKE HLNSLGQKLLK TLRMRLRRCH RFLPCENKSK AVEQVKSDFN KLEDQGVYKA MNEFDIFINC IEAYMMIKMK S

**Biological Activity:** The ED<sub>50</sub> as determined by dose dependant proliferation of a murine MC/9 cell line was found to be < 2 ng/ml, corresponding to a specific activity of 5x10<sup>5</sup> IU/mg.

**Endotoxicity:** The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

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<i>small</i>	2 µg	Cat.N°	12340102
<i>medium</i>	10 µg	Cat.N°	12340103
<i>large</i>	50 µg	Cat.N°	12340105
<i>x-large</i>	250 µg	Cat.N°	12340107
<i>xx-large</i>	1000 µg	Cat.N°	12340108

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