

## Recombinant Rat Interleukin-10 (rr IL-10)

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

**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:** rr Interleukin-10 produced in E.coli is a single, glycosylated polypeptide chain containing 160 amino acids and having a molecular mass of 18.7 kDa. The Interleukin-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 25mM sodium phosphate + 100mM NaCl, pH-7.25. The aliquotes of 1µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rr 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 rr IL-10, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rr 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 prevent freeze-thaw cycles.

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

**Endotoxicty:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Amino acid sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ser-Lys-Gly-His.

**Biological Activity:** The ED<sub>50</sub> as determined by the dose dependent inhibition of MC/9 proliferation is less than 10 ng/ml.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	13340102
<i>medium</i>	10 µg	Cat.N°	13340103
<i>large</i>	50 µg	Cat.N°	13340105
<i>x-large</i>	250 µg	Cat.N°	13340107
<i>xx-large</i>	1000 µg	Cat.N°	13340108

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Gladiolenweg 2; 26169 Friesoythe; Germany  
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)