

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

### **Product Information**

Product Name	Cat#	Size
	90174ES10	10 µg
Recombinant Rat Interleukin-10 (Rat IL-10)	90174ES60	100 µg
	90174ES76	500 µg

#### **Product Description**

Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 family of  $\alpha$ -helical cytokines that also includes IL-19, IL-20, IL-22, IL-24, and IL-26/AK155. IL-10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer. Mature human IL-10 shares 72%-86% amino acid sequence identity with bovine, canine, equine, feline, mouse, ovine, porcine, and rat IL-10. IL-10, a cytokine produced by CD4+ T lymphocytes belonging to the Th-2 subset, has previously been shown to inhibit the synthesis of IFN-gamma by both T cells and NK cells. The anti-inflammatory actions of IL-10 may be therapeutically useful either directly or through modulation of HO-1 activity.

## **Product Properties**

Synonyms	Interleukin-10, IL-10, Cytokine synthesis inhibitory factor, IL10A, TGIF, CSIF	
Accession	P29456	
GeneID	25325	
Source	E.coli-derived rat IL-10 protein, Ser19-Asn178.	
Molecular Weight	Approximately 18.6 kDa.	
AA Sequence	SKGHSIRGDN NCTHFPVSQT HMLRELRAAF SQVKTFFQKK DQLDNILLTD SLLQDFKGYL GCQALSEMIK FYLVEVMPQA ENHGPEIKEH LNSLGEKLKT LWIQLRRCHR FLPCENKSKA VEQVKNDFNK LQDKGVYKAM NEFDIFINCI EAYVTLKMKN	
Tag	None	
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Purity	> 97% by SDS-PAGE and HPLC analyses.	
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cell proliferation assay using murine MC/9-2 cells is less than 1.0 ng/mL, corresponding to a specific activity of $> 1.0 \times 10^6$ IU/mg. Fully biologically active when compared to standard.	
Endotoxin	< 0.1 EU per 1µg of the protein by the LAL method.	
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 8.0, 100 mM NaCl.	
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.	

#### Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.



- 1. Avoid repeated freeze-thaw cycles.
- 2. For your safety and health, please wear lab coats and disposable gloves for operation.
- 3. For research use only!