

# **Product** Data Sheet

# IL-10 Protein, Human (CHO)

Cat. No.: HY-P7030A Synonyms: rHulL-10; CSIF

Species: Human СНО Source:

P22301 (S19-N178) Accession:

Gene ID: 3586 Molecular Weight: 18-19 kDa

#### **PROPERTIES**

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SPGQGTQSEN SCTHFPGNLP NMLRDLRDAF SRVKTFFQMK DQLDNLLLKE SLLEDFKGYL GCQALSEMIQ FYLEEVMPQA ENQDPDIKAH VNSLGENLKT LRLRLRRCHR FLPCENKSKA VEQVKNAFNK SEFDIFINYI EAYMTMKIRN LQEKGIYKAM

### **Biological Activity**

- 1.The ED<sub>50</sub> is <0.2 ng/mL as measured by MC/9 cells.
- 2.Immobilized human IL10 at 10  $\mu$ g/mL (100  $\mu$ l/well) can bind Cynomolgus IL10RA. The ED<sub>50</sub> for this effect is 0.2189-1.732  $\mu$ g/mL.
- 3. Immobilized Recombinant Human IL10/Interleukin-10 Protein at 2 μg/mL (100 μL/well) can bind Biotinylated Recombinant Rhesus IL10RA Protein. The ED<sub>50</sub> for this effect is 218.9 ng/mL.

### **Appearance**

Lyophilized powder

## **Formulation**

Lyophilized from a 0.2 μm filtered solution of PBS or 20 mM PB, 150 mM NaCl, pH 7.4 or PBS, pH 7.4, 8% trehalose.

### **Endotoxin Level**

<0.2 EU/µg, determined by LAL method.

## Reconstitution

It is not recommended to reconstitute to a concentration less than  $100 \, \mu g/mL$  in  $ddH_2O$ . For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

#### Storage & Stability

Stored at -20°C for 2 years from date of receipt. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

### Shipping

Room temperature in continental US; may vary elsewhere.

#### **DESCRIPTION**

## Background

Interleukin 10 (IL-10) is an anti-inflammatory, immunomodulatory cytokine that regulates mucosal inflammation. A promising alternative is interleukin 10 (IL-10), a cytokine with multiple anti-inflammatory and immunoregulatory activities, including inhibition of T-cell/macrophage activation and proinflammatory cytokine synthesis [1]. IL-10, a cytokine possessing strong anti-inflammatory properties, is under investigation for its therapeutic use as an immunosuppressant. The immunosuppressive actions of IL-10 and corticosteroids include inhibition of proinflammatory cytokine production by monocytes and polymorphonuclear leukocytes (IFN- $\gamma$ , TNF- $\alpha$ , IL-1 $\beta$ , IL-6, GM-CSF) both at the protein and messenger RNA levels and prevention of mitogen-induced T-cell proliferation [2].

#### **REFERENCES**

[1]. Fedorak RN, et al. Recombinant human interleukin 10 in the treatment of patients with mild to moderately active Crohn's disease. The Interleukin 10 Inflammatory Bowel Disease Cooperative Study Group. Gastroenterology. 2000 Dec;119(6):1473-82.

[2]. Chakraborty A, et al. Pharmacodynamic interaction of recombinant human interleukin-10 and prednisolone using in vitro whole blood lymphocyte proliferation. J Pharm Sci. 2002 May;91(5):1334-42.

Caution: Product has not been fully validated for medical applications. For research use only.

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