

## IL10

### Recombinant Porcine Interleukin-10

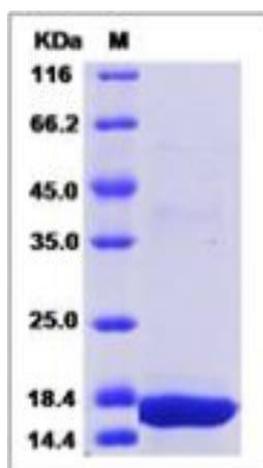
<b>Catalog No.</b>	CRI188A CRI188B	<b>Quantity:</b>	5 µg 20 µg
<b>Alternate Names:</b>	CSIF, IL-10		
<b>Description:</b>	<p>IL-10 is a anti-inflammatory cytokine which belongs to the IL-10 family. It is produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types, while it is produced primarily by monocytes and to a lesser extent by lymphocytes. IL-10 is mainly expressed in monocytes and Type 2 T helper cells (TH2), mast cells, CD4 +CD25+Foxp3+ regulatory T cells, and also in a certain subset of activated T cells and B cells. IL-10 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. IL-10 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. The importance of interleukin 10 for counteracting excessive immunity in the human body is demonstrated in patients with Crohn's disease react favorably towards treatment with bacteria producing recombinant IL-10. IL-10 inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells. It also displays a potent ability to suppress the antigen-presentation capacity of antigen presenting cells. However, it is also stimulatory towards certain T cells and mast cells and stimulates B cell maturation and antibody production.</p>		
<b>UniProt ID:</b>	Q29055		
<b>Gene ID:</b>	397106		
<b>Protein Construction:</b>	A DNA sequence encoding the porcine IL10 (Ser19-Asn175) was expressed with Met at the N-terminus.		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	Recombinant porcine IL10 consists of 158 aa with a predicted MW of 18.2 kDa and migrates at ~18 kDa in SDS-PAGE under reducing conditions.		
<b>Formulation:</b>	Lyophilized from sterile-filtered PBS, pH 7.4 containing 5% mannitol, 5% trehalose and 0.01% Tween80.		
<b>Purity:</b>	> 95% as determined by SDS-PAGE.		
<b>Biological Activity:</b>	<ol style="list-style-type: none"> <li>1. ED<sub>50</sub> = 1-5 ng/ml, determined by a MC/9 mouse mast cell line proliferation assay.</li> <li>2. In a functional ELISA, immobilized porcine IL-10 at 2 µg/ml (100 µl/well) can bind Rhesus IL10RA-Fc. The EC<sub>50</sub> of Cynomolgus IL10RA-Fc is 0.14-0.34 µg/ml.</li> </ol>		



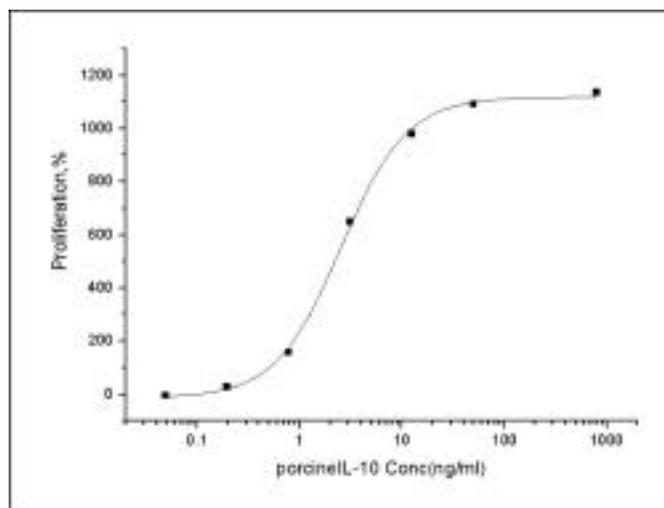
**Reconstitution:** Centrifuge vial prior to opening. Reconstitute lyophilized porcine IL-10 in sterile water to prepare a stock solution of 0.25 mg/ml mg/ml. The stock solution should be apportioned into working aliquots and stored at -20°C to -80°C. Further dilution should be made in medium or buffered solution containing a carrier protein such as 0.1-1.0% BSA.

**Storage & Stability:** Store at -20°C to -80°C for up to 1 year. Recommended to store reconstituted stock solution in working aliquots. **Avoid repeated freeze-thaw cycles.**

SDS-PAGE



Measured in a cell proliferation assay using MC/9-2 mouse mast cells. The ED50 for this effect is typically 1-5 ng/mL.



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.