Active Recombinant Rat Il10 protein, His-tagged

Cat. No. Il10-1657R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat Il10 protein(P29456)(19~178 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Rat
Source	E.coli
ProteinLength	19-178 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Interleukin 10 (IL10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. IL10 is a cytokine with multiple, pleiotropic, effects in immunoregulation and inflammation. It downregulates the expression of Th1 cytokines, MHC class II antigens, and co-stimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL10 can block NF-κB activity, and is involved in the regulation of the JAK-STAT signaling pathway. Investigation also has shown that IL-10 predominantly inhibits lipopolysaccharide (LPS) and bacterial product mediated induction of the pro-inflammatory cytokines TNFα, IL-1β, IL-12 and IFNγ secretion from Toll-Like Receptor (TLR) triggered myeloid lineage cells. Besides, Interleukin 10 Receptor Alpha (IL10Ra) has been identified as an interactor of IL10, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat IL10 and recombinant rat IL10Ra. Briefly,

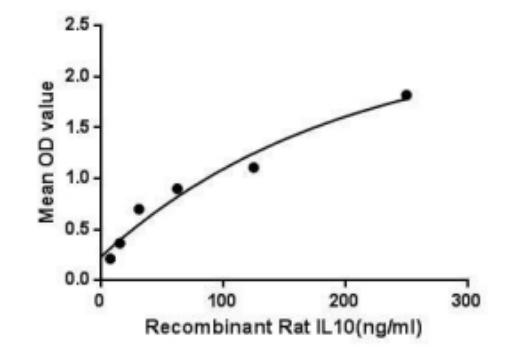
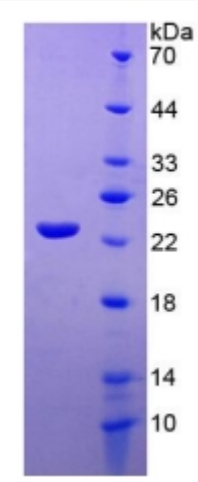
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	IL10 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL10Ra-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL10 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of IL10 and IL10Ra was shown, and this effect was in a dose dependent manner.
Molecular Mass	22.3kDa
Purity	> 95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Il10 interleukin 10 [Rattus norvegicus]
Official Symbol	Il10
Synonyms	IL10; interleukin 10; interleukin-10; CSIF; IL-10; cytokine synthesis inhibitory factor; IL10X;
Gene ID	25325
mRNA Refseq	NM_012854

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Protein Refseq	NP_036986
Activity	
SDS-PAGE	

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