Active Interleukin 10 (IL10)

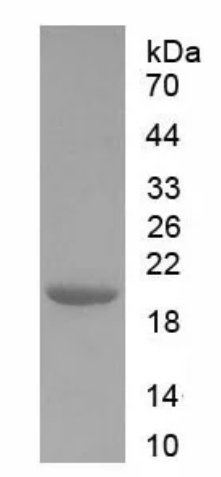
Catalog#:PHV12088

概述（Summary）

别称（Alternative Names）	CSIF; IL10A; TGIF; Cytokine Synthesis Inhibitory Factor
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu22-Lys175】
Accession #	Q6A2H4
表达宿主（Host）	293F
种属（Species）	Chicken (Gallus)
预测分子量（Predicted MW）	19.9 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3. In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators. Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating

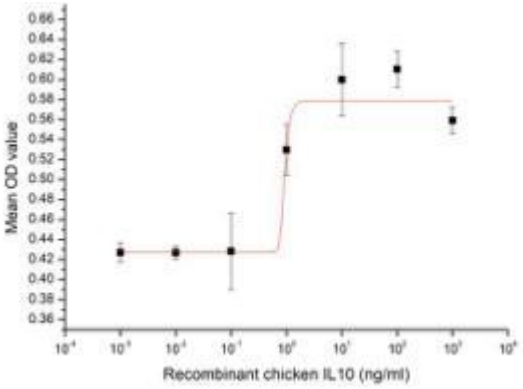
factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF-alpha. Interferes also with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation. In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Interleukin 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. Mature human IL 10 shares 72%-86% amino acid sequence identity with bovine, canine, equine, feline, mouse, ovine, porcine, and rat IL 10. Whereas human IL 10 is active on mouse cells, mouse IL 10 does not act on human cells. IL 10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation. It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses. The activity of IL10 is usually measured by a cell proliferation assay using MC/9 mouse mast cells. MC/9 cells were seeded into triplicate wells of 96-well plates at a density of 8,000 cells/well with 2% serum standard DMEM which contains various concentrations of recombinant chicken IL4. After incubated for 3 days, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2-

4 hours at 37 ℃. Proliferation of MC/9 cells after incubation with IL10 for 3 days observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant chicken IL10 for 3 days. The result was shown in Figure 2. It was obvious that IL10 significantly increased cell viability of MC/9 cells. The ED50 is 0.92 -9.2 ng/ml. Figure 2. Cell proliferation of MC/9 cells after stimulated with IL10.

注意事项（Note）

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