

Human IL10 protein, His tag (active)

Cat. No. GTX00086-pro**Applications** Functional Assay**Species** Human**Package**

10 µg

Applications

Application Note

Interleukin 10 (IL-10), also known as human cytokine synthesis inhibitory factor (CSIF), is an anti-inflammatory cytokine. IL-10 was initially reported to suppress cytokine secretion, antigen presentation and CD4 T cell activation. Further investigation has shown that IL-10 predominantly inhibits lipopolysaccharide (LPS) mediated induction of the pro-inflammatory cytokines TNF α , IL-1 β , IL-12, and IFN γ made by cells such as macrophages and Th1 T cells. Therefore, THP-1 cells were cultured in 24 well plates at a concentration of 10⁶ cells/ml and activated by LPS (1 µg/ml) in the absence or presence of IL-10 (5 ng/ml, 10 ng/ml) for 24h and production of IL-1 β was determined in the supernatants by cytokine specific ELISA. Activation of THP-1 cells with LPS (1 µg/ml) resulted in high levels of production of IL-1 β and strong inhibitory effects of IL-10 (5 ng/ml, 10 ng/ml) were observed on the production of IL-1 β .

Observed MW (kDa) 18 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Ser19~Asn178 (NP_000563.1)**Expression System** HEK293 cells**Purity** > 97%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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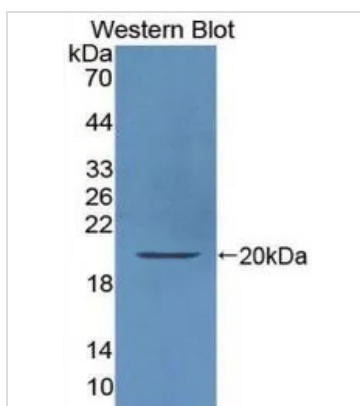
DATA IMAGES

Effects of IL-10 on IL-1 β production by THP1 cells			
Sample (cell supernatant of THP1 cells)	O.D.value	Corrected	Concentration of IL-1 β (ng/ml)
Unstimulated	0.151	-0.009	<2.343
Stimulated with LPS (1 μ g/ml)	0.676	0.516	19.9
Stimulated with LPS (1 μ g/ml) and IL-10 (5ng/ml)	0.160	0.000	<2.343
Stimulated with LPS (1 μ g/ml) and IL-10 (10ng/ml)	0.150	-0.010	<2.343

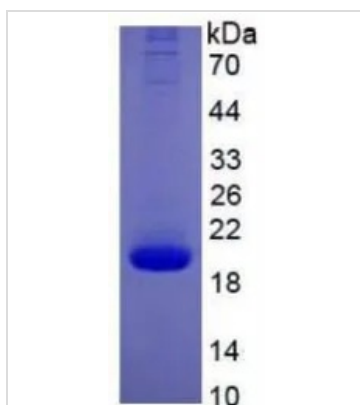
GTx00086-pro Functional Assay Image

ELISA detection of secreted IL-1 β protein expression from 1 μ g/ml LPS mediated THP-1 cells reduced by GTx00086-pro Human IL10 protein (active).

Recombinant protein concentrations: 5, and 10 ng/ml.


GTx00086-pro Image

WB analysis of GTx00086-pro Human IL10 protein (active).


GTx00086-pro Image

SDS-PAGE analysis of GTx00086-pro Human IL10 protein (active).



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