

Recombinant Human IL-10/Interleukin-10 Protein

Catalog No. PKSH032005

Note: Centrifuge before opening to ensure complete recovery of vial contents.

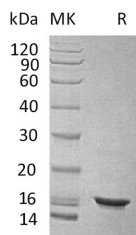
Description

Synonyms	Interleukin-10;IL-10;Cytokine synthesis inhibitory factor;CSIF;IL10;RP11-262N9.1;IL10A;MGC126450;MGC126451;TGIF
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser19-Asn178
Accession	P22301
Calculated Molecular Weight	18.6 kDa
Observed molecular weight	16 kDa
Tag	None
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Interleukin 10(IL10), also known as cytokine synthesis inhibitory factor (CSIF), is a secreted protein and belongs to the

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IL-10 family. IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts. IL-10 is an anti-inflammatory TH2 cytokine that has a critical role in limiting the immune response to pathogens to prevent host damage. As IL-10 is produced in several T helper populations, it is proposed that it provides a feedback loop to limit the effector functions of macrophages and DCs on T cells. Once expressed, IL-10 signals through the IL-10 receptor (IL-10R) to activate STAT3. As IL-10 is a strong inhibitor of inflammation, it has become a viable biomarker for various diseases and conditions as well as a therapeutic molecule for certain conditions. In addition to elevated levels in parasitic infection, high expression levels of IL-10 are also found in retroviral infections inducing immunodeficiency. The immunosuppressive properties of IL-10 suggest a possible clinical use of IL-10 in suppressing rejections of grafts after organ transplantations.