

Active Recombinant Human IL10

Cat. No. IL10-507H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL-10 /Interleukin-10 Protein (rhIL10) Ser19 -Asn178 (Accession # NP_000563.1) was produced in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	19-178 a.a.
Description	Stem Cell Factor is also known as SCF, kit-ligand, KL, steel factor, KITLG, FPH2, KL-1, Kitl, MGF, SCF, SF, or SHEP7, and is a cytokine that binds to the c-Kit receptor (CD117). SCF can exist both as a transmembrane protein and a soluble protein. This cytokine plays an important role in hematopoiesis (formation of blood cells), spermatogenesis, and melanogenesis. The soluble and transmembrane forms of the protein are formed by alternative splicing of the same RNA transcript. Soluble and transmembrane SCF is produced by fibroblasts and endothelial cells. Soluble SCF has a molecular weight of 18,5 KDa and forms a dimer. SCF plays an important role in the hematopoiesis during embryonic development. Sites where hematopoiesis takes place, such as the fetal liver and bone marrow, all express SCF. During development, the presence of the SCF also plays an important role in the localization of melanocytes, cells that produce melanin and control pigmentation. SCF plays a role in the regulation of HSCs in the stem cell niche in the bone marrow. SCF may be used along with other cytokines to culture HSCs and hematopoietic progenitors. The expansion of these cells ex-vivo (outside the body) would allow advances in bone-

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	marrow transplantation, in which HSCs are transferred to a patient to re-establish blood formation.
Predicted N Terminal	Ser19
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose are added as protectants before lyophilization.
Bio-activity	Determined by the dose-dependent stimulation of the proliferation of human TF-1 cells. The ED50<5 ng/ml,="" corresponding="" to="" a="" specific="" activity="" of="">2X10 ⁵ Unit/mg.
Molecular Mass	rhIL10 contains no "Tags" and has a calculated MW of 18.6 kDa. DTT-reduced protein migrates as 21 kDa protein due to glycosylation.
Endotoxin	Less than 1.0 EU per µg of the rhIL10 by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze-thaw cycles. No activity loss was observed after storage at: In lyophilized state for 1 year (4 centigrade-8 centigrade); After reconstitution under sterile conditions for 1 month (4 centigrade-8 centigrade) or 3 months (-20 centigrade to -70 centigrade).

GENE INFORMATION

Gene Name	IL10 interleukin 10 [Homo sapiens]
Official Symbol	IL10
Synonyms	IL10; interleukin 10; interleukin-10; CSIF; cytokine synthesis inhibitory factor; IL 10;

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	IL10A; T cell growth inhibitory factor; TGIF; T-cell growth inhibitory factor; GVHDS; IL-10; MGC126450; MGC126451;
Gene ID	3586
mRNA Refseq	NM_000572
Protein Refseq	NP_000563
MIM	124092
UniProt ID	P22301
Chromosome Location	1q31-q32
Pathway	African trypanosomiasis, organism-specific biosystem; African trypanosomiasis, conserved biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Asthma, organism-specific biosystem;
Function	cytokine activity; growth factor activity; interleukin-10 receptor binding;