

Recombinant human IL10

Catalog No: #AG0009

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Description

Product Name	Recombinant human IL10
Host Species	HEK293
Purification	> 95% by Tris-Bis PAGE;> 95% by SEC-HPLC
Immunogen Description	Ser19-Asn178
Target Name	IL10
Other Names	Human IL-10, h-IL-10, rh-IL-10, recombinant IL-10, interleukin-10
Accession No.	Uniprot:P22301 Gene ID:3586
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GeneID	3586
Target Species	human
Calculated MW	18.6 KDa
Tag Info	additional amino acid free
Formulation	0.22 µm filtered solution of PBS, pH 7.4.
Storage	Aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.

Background

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 (1, 2). IL?10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts (2 ? 5). 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 (6, 7). IL?10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer (6, 8, 9). The IL?10 dimer binds to two IL?10 R alpha /IL?10 R1 chains, resulting in recruitment of two IL?10 R beta /IL?10 R2 chains and activation of a signaling cascade involving JAK1, TYK2, and STAT3 (10). IL?10 R beta does not bind IL?10 by itself but is required for signal transduction (1). IL?10 R beta also associates with IL?20 R alpha, IL?22 R alpha, or IL?28 R alpha to form the receptor complexes for IL?22, IL?26, IL?28, and IL?29 (11 ? 13). IL?10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation (14 ? 16). It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses (2).

Note: This product is for in vitro research use only