Recombinant Human IL-10/Interleukin-10 Protein

Catalog Number: PKSH032005



Description			
Species	Human		
Mol_Mass	18.6 kDa		
Accession	P22301		
Bio-activity	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 $< -20^{\circ}$ 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% Tween 80 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.		

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

Reconstitution	Please refer to the printed manual for detailed information.			
Data				
	kDa M	K R		
	120 90 60 40			
	30	-		
	20			
	16 14			

> 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 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 in 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 suggest a possible clinical use of IL-10 in suppressing rejections of grafts after organ transplantations.

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