

## Recombinant Human IL-10/Interleukin-10 Protein

**Catalog Number: PKSH032005**

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

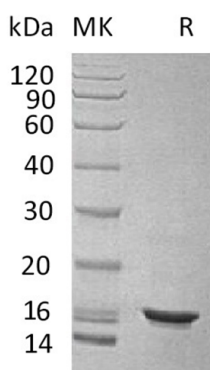
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human IL-10; Interleukin-10 protein Ser19-Asn178
<b>Calculated MW</b>	18.6 kDa
<b>Observed MW</b>	16 kDa
<b>Accession</b>	P22301
<b>Bio-activity</b>	Loaded Human IL-10RA-His(PKSH033632) on HIS1K Biosensor, can bind Human IL-10 (PKSH032005) with an affinity constant of 1 pM as determined in BLI assay.

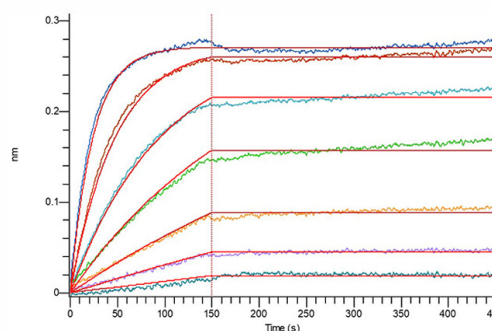
### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.



Loaded Human IL-10RA-His(PKSH033632) on HIS1K Biosensor, can bind Human IL-10 (PKSH032005) with an affinity constant of 1 pM as determined in BLI assay.

### 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 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.