Recombinant Human IL-10

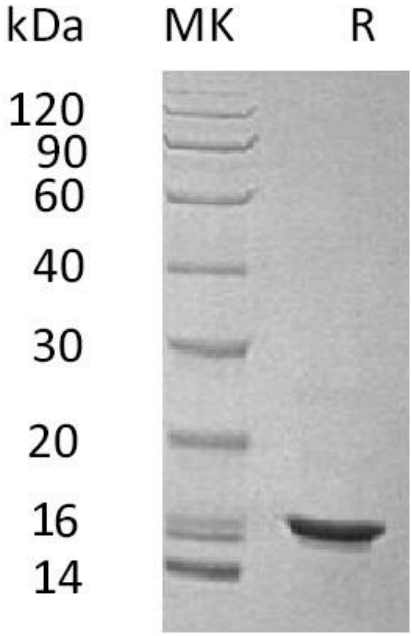
Catalog No.: RP0008

Basic Information

Information	
Source	*Human Cells*
Description	Recombinant Human Interleukin-10 is produced by our Mammalian expression system and the target gene encoding Ser19-Asn178 is expressed.
Accession	P22301
Known As	Interleukin-10; IL-10; Cytokine synthesis inhibitory factor; CSIF; IL10; RP11-262N9.1; IL10A; MGC126450; MGC126451; TGIF
Predicted Mol Mass	18.6 KDa
Apparent Mol Mass	16 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

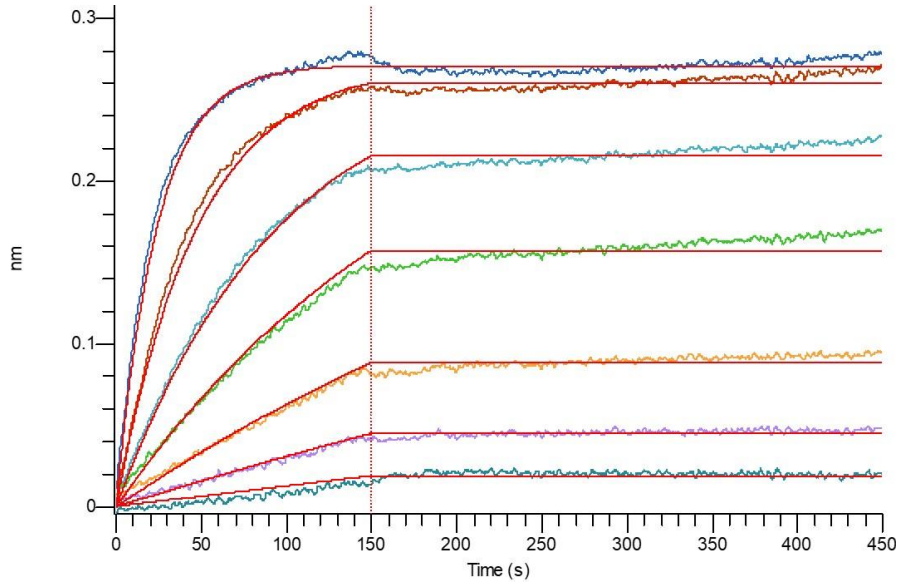
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-BLI



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

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 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