

Recombinant Human IL-10 Rα Catalog No: CP87

Description Recombinant Human Interleukin-10 Receptor Subunit Alpha is produced by our Baculovirus expression

system and the target gene encoding His22-Asn235 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Interleukin-10 receptor subunit alpha; IL-10 receptor subunit alpha; IL-10R subunit alpha; IL-10RA;

CDw210a; Interleukin-10 receptor subunit 1; IL-10R subunit 1; IL-10R1; CD210; IL10RA; IL10R

Accession No. Q13651

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence HGTELPSPPSVWFEAEFFHHILHWTPIPNQSESTCYEVALLRYGIESWNSISNCSQTLSYDLTAVTLDLY HSNGYRARVRAVDGSRHSNWTVTNTRFSVDEVTLTVGSVNLEIHNGFILGKIQLPRPKMAPANDTYESI FSHFREYEIAIRKVPGNFTFTHKKVKHENFSLLTSGEVGEFCVQVKPSVASRSNKGMWSKEECISLTRQ

YFTVTNHHHHHH

Background

Interleukin-10 Receptor alpha (IL-10R α) is a transmembrane glycoprotein member of the class II cytokine receptor family. Mature human IL-10 R α consists of a 214 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 322 aa cytoplasmic domain. Within the ECD, human IL-10 R α shares 59% aa sequence identity with mouse and rat IL-10R α . IL-10 R α is required for mediating the effects of IL-10,a critical molecule in the control of microbial infections, allergic and autoimmune inflammation, and cancer. IL-10R α is the ligand specific subunit of the IL-10 receptor complex. Noncovalent dimers of IL-10 bind to IL-10 R α , resulting in the recruitment of IL-10 R β . Immunosuppressive signal transduction through the IL-10 receptor complex can be inhibited by activation of TLR2, 4, or 9, enabling strengthened immune responses during infection. Polymorphisms of human IL-10 R α may limit viral immune evasion by retaining full responsiveness to human IL-10 but responding weakly to the cytomegalovirus homolog of IL10.

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