

Active Recombinant Human IL10RA protein, Fc/Avi-tagged, Biotinylated

Cat. No. IL10RA-051H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human IL10RA(His22-Asn235) protein, fused to Fc/Avi tag at the C-terminus, was expressed in CHO cells .
Species	Human
Source	CHO
ProteinLength	His22-Asn235
Description	Interleukin-10 Receptor alpha (IL-10 RA), also known as IL-10 R1, is a 90-110 kDa transmembrane glycoprotein member of the class II cytokine receptor family (1). IL-10 RA is required for mediating the effects of IL-10, a critical molecule in the control of microbial infections, allergic and autoimmune inflammation, and cancer (2-5). Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells (6). IL-10 Rα is the ligand specific subunit of the IL-10 receptor complex. Noncovalent dimers of IL-10 bind to IL-10 Rα, resulting in the recruitment of IL-10 Rβ (6-8). IL-10 Rβ is a ubiquitously expressed transmembrane protein that does not bind IL-10 by itself but is required for signal transduction and in vivo IL-10 responsiveness (7, 9). IL-10 Rβ also associates with IL-20 Rα, IL-22 Rα, or IL-28 Rα to form the receptor complexes for IL-22, IL-26, IL-28, and IL-29 (1). Immunosuppressive signal transduction through the IL-10 receptor complex can be inhibited by

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activation of TLR2, 4, or 9, enabling strengthened immune responses during infection (10). 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 IL-10 (11). 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 (12). Within the ECD, human IL-10 R α shares 59% aa sequence identity with mouse and rat IL-10 R α

Predicted N Terminal	His22
Form	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose.
Bio-activity	The biotin to protein ratio is greater than 0.7 as determined by the HABA assay. Measured by its binding ability in a functional ELISA. When Recombinant Human IL10 is coated at 2 μ g/mL (100 μ L/well), Biotinylated Recombinant Human IL10RA Fc Chimera Avi-tag binds with 20-100 ng/mL.
Molecular Mass	74-85 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 μ g of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after

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reconstitution.

Reconstitution Reconstitute at 500 µg/mL in PBS.

Conjugation Biotin

GENE INFORMATION

Gene Name IL10RA interleukin 10 receptor, alpha [Homo sapiens]

Official Symbol IL10RA

Synonyms IL10RA; interleukin 10 receptor, alpha; IL10R; interleukin-10 receptor subunit alpha; CD210; CD210a; CDW210A; HIL 10R; IL-10RA; IL-10R subunit 1; IL-10R subunit alpha; IL-10 receptor subunit alpha; interleukin-10 receptor subunit 1; interleukin-10 receptor alpha chain; HIL-10R; IL-10R1;

Gene ID 3587

mRNA Refseq NM_001558

Protein Refseq NP_001549

MIM 146933

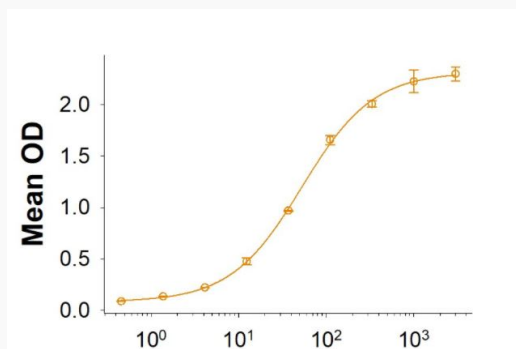
UniProt ID Q13651

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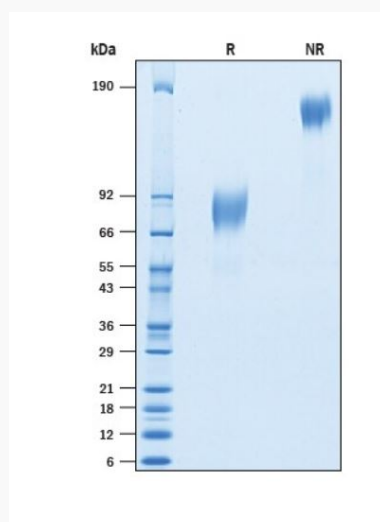
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Binding Activity



SDS-PAGE



2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.