

Active Recombinant Human IL6R Homodimer Protein, His tagged

Cat. No. IL6R-46H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

IL-6R α protein dimer contains the IL-6R α extracellular domain (UniProt# P08887) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus was expressed in HEK293T.

Species

Human

Source

HEK293T

ProteinLength

20-365 aa

Description

Human interleukin 6 receptor alpha (IL-6R α) is a Type I transmembrane protein and Type I cytokine receptor and plays a crucial role in immune response, inflammation, and hematopoiesis. IL-6R α is also known as Cluster of Differentiation 126 (CD126), IL6R, CD126, IL-6R-1, IL-6RA, IL6Q, IL6RA, IL6RQ, and gp80. IL-6R α contains an extracellular domain with an Ig-like domain, cytokine binding module (CBM) domains, and a long flexible stalk region followed by a transmembrane domain and intracellular domains. IL-6R α binding to its ligand interleukin 6 (IL-6) results in homodimerization and subsequent association with IL-6R β (gp130) dimer resulting in higher order complexes. IL-6R α protein is involved in multiple disease processes due to its central role in IL-6 signaling. Dysregulation of IL-6R α protein is implicated in many cancers and autoimmune diseases, therefore, a recombinant protein mimicking the IL-6R α protein dimer conformation can be critical for basic research and therapeutic discovery.

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Molecular Mass	93 kDa
Purity	Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition
Application	Verified Applications: SPR & ELISA for IL-6Rα and interleukin 6 (IL-6) ligand protein binding assays and ELISA for IL-6Rα-specific antibody binding assays. Suggested Applications: SPR & BLI for IL-6Rα-specific antibody and IL-6 protein binding assays. Animal immunization, RUO.
Storage	Store at -80 centigrade.
Storage Buffer	0.22μm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice

GENE INFORMATION

Gene Name	IL6R interleukin 6 receptor [Homo sapiens (human)]
Official Symbol	IL6R
Synonyms	IL6R; interleukin 6 receptor; interleukin-6 receptor subunit alpha; CD126; IL-6R 1; CD126 antigen; membrane glycoprotein 80; IL-6 receptor subunit alpha; gp80; IL6RA; IL-6RA; IL-6R-1; MGC104991;
Gene ID	3570
mRNA Refseq	NM_000565
Protein Refseq	NP_000556

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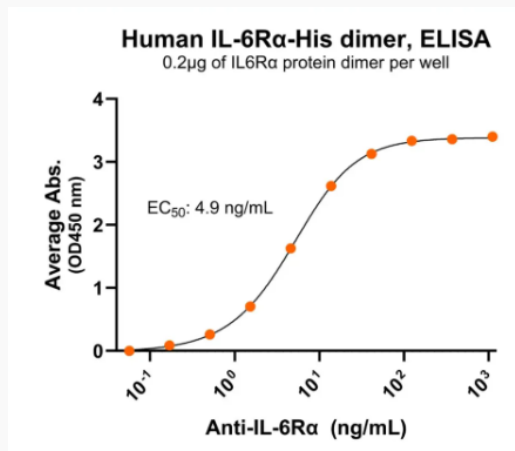
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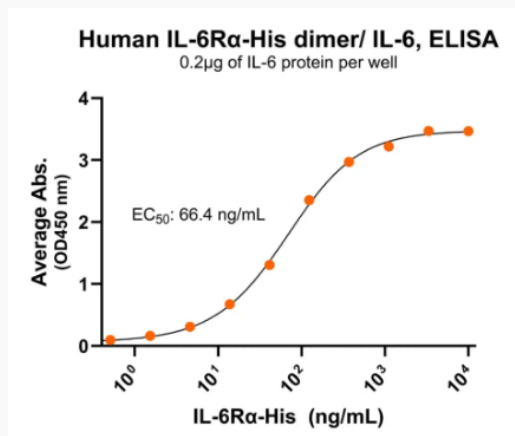
UniProt ID P08887

**Bioactivity-Antibody
Binding**



Immobilized human IL-6R α protein dimer, His-tag at 2 μ g/mL (100 μ L/well) can bind anti-human IL-6R α monoclonal antibody with half maximal effective concentration (EC₅₀) range of 2.4-9.7 ng/mL (QC tested).

**Bioactivity-Ligand
Binding**



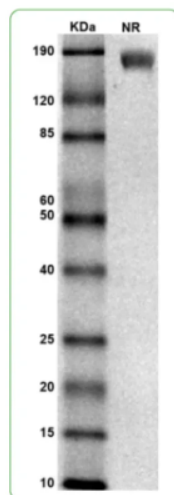
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Immobilized human IL-6 at 2 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind human IL-6R α protein dimer, His-tag with half maximal effective concentration (EC50) range of 33.2-132.7 ng/mL (QC tested).

SDS-PAGE and WB



MW: Molecular Weight marker reduced condition NR: IL-6R α dimer under non-reduced condition