

# Active Recombinant Human IL6R Homodimer Protein, His tagged

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

## SPECIFICATION

**Product Overview** IL-6R $\alpha$  protein dimer contains the IL-6R $\alpha$  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 $\alpha$ ) is a Type I transmembrane protein and Type I cytokine receptor and plays a crucial role in immune response, inflammation, and hematopoiesis. IL-6R $\alpha$  is also known as Cluster of Differentiation 126 (CD126), IL6R, CD126, IL-6R-1, IL-6RA, IL6Q, IL6RA, IL6RQ, and gp80. IL-6R $\alpha$  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 $\alpha$  binding to its ligand interleukin 6 (IL-6) results in homodimerization and subsequent association with IL-6R $\beta$  (gp130) dimer resulting in higher order complexes. IL-6R $\alpha$  protein is involved in multiple disease processes due to its central role in IL-6 signaling. Dysregulation of IL-6R $\alpha$  protein is implicated in many cancers and autoimmune diseases, therefore, a recombinant protein mimicking the IL-6R $\alpha$  protein dimer conformation can be critical for basic research and therapeutic discovery.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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

## GENE INFORMATION

<b>Gene Name</b>	IL6R interleukin 6 receptor [ Homo sapiens (human) ]
<b>Official Symbol</b>	IL6R
<b>Synonyms</b>	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;
<b>Gene ID</b>	3570
<b>mRNA Refseq</b>	NM_000565
<b>Protein Refseq</b>	NP_000556

 Tel: 1-631-559-9269 1-516-512-3133

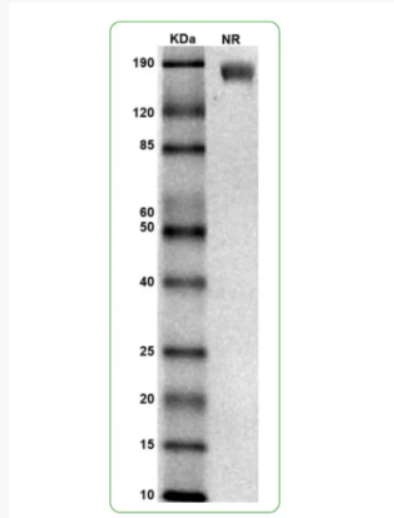
 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**MIM** 147880

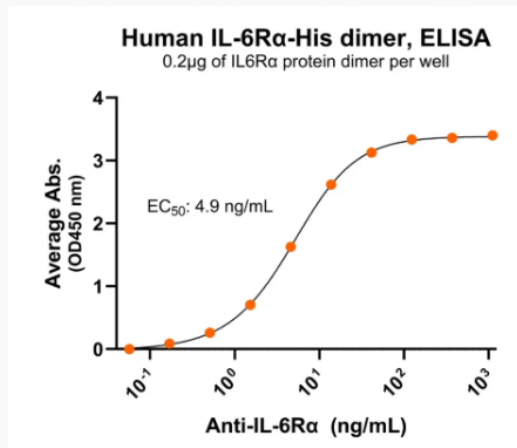
**UniProt ID** P08887

**SDS-PAGE and WB**



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

**Bioactivity-Antibody Binding**



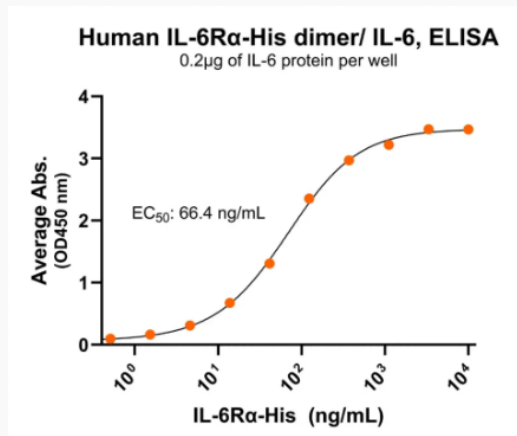
Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA

Immobilized human IL-6R $\alpha$  protein dimer, His-tag at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind anti-human IL-6R $\alpha$  monoclonal antibody with half maximal effective concentration (EC<sub>50</sub>) range of 2.4-9.7 ng/mL (QC tested).


**Bioactivity-Ligand Binding**



Immobilized human IL-6 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind human IL-6R $\alpha$  protein dimer, His-tag with half maximal effective concentration (EC<sub>50</sub>) range of 33.2-132.7 ng/mL (QC tested).

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA