

## Active Recombinant Human IL6R protein, His/Avi-tagged, Biotinylated

Cat. No. IL6R-051H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Biotinylated Recombinant Human IL6R(Leu20-Pro365) protein, fused to His/Avi tag at the C-terminus, was expressed in CHO cells .
<b>Species</b>	Human
<b>Source</b>	CHO
<b>ProteinLength</b>	Leu20-Pro365
<b>Description</b>	<p>Interleukin-6 receptor subunit alpha (IL-6Ra), also known as membrane glycoprotein 80 (gp80), IL-6R 1 or CD126, is a single-pass type I membrane protein of the interleukin receptor family. Human IL-6Ra is an 80 kDa receptor component that binds IL-6 with low affinity and forms one-half of the IL-6R receptor complex. IL-6Ra associates with a non-ligand binding 130 kDa glycoprotein signal-transducing component (CD130; gp130) for high-affinity binding to IL-6 (1-4). When bound to IL-6, the IL-6R complex forms a trimer, which homodimerizes to form a hexameric cellular signaling complex (1, 4). Human IL-6Ra consists of an extracellular domain (ECD) with an N-terminal Ig-like C2-type domain and a cytokine-binding domain containing two fibronectin type-III domains with a WSXWS motif, a helical transmembrane segment and a cytoplasmic domain. Within the mature ECD, human IL-6Ra shares 51% and 52% amino acid sequence identity with mouse and rat IL-6Ra, respectively. Soluble forms of IL-6Ra can be generated via ADAM10 and ADAM17 cleavage of membrane bound IL-6Ra, alternative mRNA splicing and microvesicle release (3, 4).</p>

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Unlike gp130 that is expressed ubiquitously, the cellular distribution of IL-6 R alpha is predominantly limited to hepatocytes and leukocyte subpopulations such as monocytes, neutrophils, T and B cells. Soluble IL-6R alpha has been found in various body fluids (5). It has been documented that elevated soluble IL-6 R is associated with numerous diseases including arthritic lesions, multiple myeloma and Crohn's disease (6, 7). Our Avi-tag Biotinylated IL-6Ra features biotinylation at a single site contained within the Avi-tag, a unique 15 amino acid peptide. Protein orientation will be uniform when bound to streptavidin-coated surface due to the precise control of biotinylation and the rest of the protein is unchanged so there is no interference in the protein's bioactivity.

<b>Predicted N Terminal</b>	Leu20
<b>Form</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
<b>Bio-activity</b>	Measured by its binding ability in a functional ELISA. When Human IL6 is immobilized at 0.25 g/mL (100 µl/ well), Biotinylated Recombinant Human IL6R His-tag Avi-tag binds with an ED50 of 0.1-1 µg/mL.
<b>Molecular Mass</b>	65-80 kDa, under reducing conditions
<b>Endotoxin</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Applications</b>	Bioactivity
<b>Storage</b>	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

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after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.

**Reconstitution** Reconstitute at 1 mg/mL in PBS.

**Conjugation** Biotin

## GENE INFORMATION

**Gene Name** [IL6R interleukin 6 receptor \[ Homo sapiens \]](#)

**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](#)

**MIM** [147880](#)

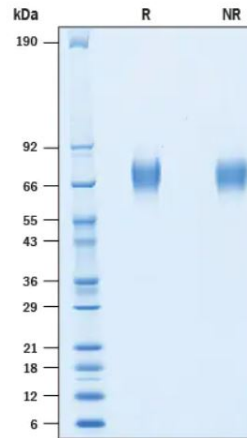
**UniProt ID** [P08887](#)

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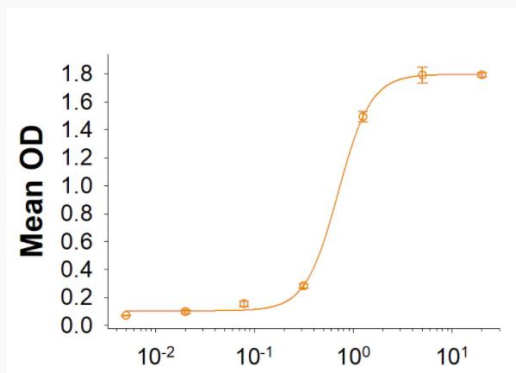
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### SDS-PAGE



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

### Binding Activity



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