

# Active Recombinant Mouse Il6st Homodimer Protein, His tagged

Cat. No. Il6st-48M    Lot. No. (See product label)

## SPECIFICATION

**Product Overview**      Mouse IL-6Rb protein dimer contains an IL-6Rb extracellular domain (UniProt# Q00560) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus was expressed in HEK293T.

**Species**      Mouse

**Source**      HEK293T

**ProteinLength**      23-617 aa

**Description**      Interleukin-6 receptor subunit beta (IL-6Rb) is a transmembrane protein and a member of the class of tall cytokine receptors. IL-6Rb is also known as Interleukin 6 Cytokine Family Signal Transducer (IL6ST), Cluster of Differentiation 130 (CD130), CDW130, and glycoprotein 130 (gp130). IL-6Rb serves as a shared signal transducing subunit of the receptor complexes for mouse cytokines, including interleukin-6 (IL-6), that mediate highly diverse biological processes. IL-6Rb can form homodimers and heterodimers with other cytokine receptors (i.e., IL-6 receptor alpha (IL-6Ra)) in response to cytokine binding. The homodimerization or heterodimerization of IL-6Rb is key to initiating intracellular signaling pathways. The extracellular domain of IL-6Rb includes an N-terminal immunoglobulin-like (Ig-like) domain (D1), a cytokine-binding homology region (CHR, D2D3), and three membrane-proximal fibronectin type III domains (FNIII, D4 to D6) followed by a transmembrane domain and cytoplasmic domain. It has been found that

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dysregulation of IL-6Rb expression and signaling mediates progression for multiple types of cancer and autoimmune diseases. Mouse IL-6Rb, the murine homolog of human IL-6Rb with conserved structural domains, is a species-specific tool essential for basic research, translational research and preclinical studies.

<b>Molecular Mass</b>	149 kDa
<b>Purity</b>	Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition
<b>Application</b>	Verified Applications: ELISA for IL-6Rb-specific antibody binding assays. Suggested Applications: SPR & BLI for IL-6Rb-specific antibody binding assays. Animal immunization, RUO.
<b>Storage</b>	Store at -80 centigrade.
<b>Storage Buffer</b>	0.22µm filtered PBS, pH 7.4
<b>Shipping</b>	Frozen Dry Ice

## GENE INFORMATION

<b>Gene Name</b>	Il6st interleukin 6 signal transducer [ <i>Mus musculus</i> (house mouse) ]
<b>Official Symbol</b>	Il6st
<b>Synonyms</b>	Il6st; interleukin 6 signal transducer; CD130; gp130; D13Ert699e; 5133400A03Rik; interleukin-6 receptor subunit beta; IL-6 receptor subunit beta; IL-6R subunit beta; IL-6R-beta; IL-6RB; membrane glycoprotein 130; oncostatin-M receptor subunit alpha
<b>Gene ID</b>	16195

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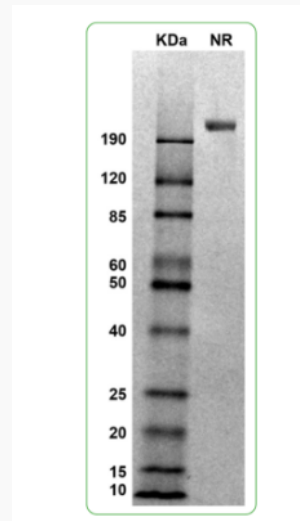
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mRNA Refseq [NM\\_010560](#)

Protein Refseq [NP\\_034690](#)

UniProt ID [Q00560](#)

#### SDS-PAGE and WB



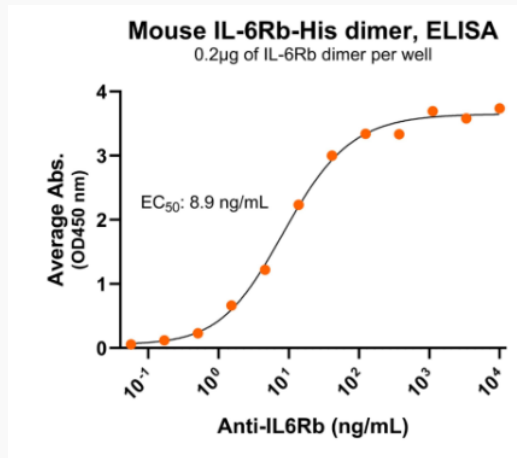
MW: Molecular Weight marker reduced condition NR: IL-6Rb dimer under non-reduced condition

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**Bioactivity-Antibody  
Binding**



Immobilized mouse IL-6Rb-His protein dimer at 2 µg/mL (100 µL/well) can bind anti-mouse IL-6Rb monoclonal antibody with half maximal effective concentration (EC50) range of 4.4-17.8 ng/mL (QC tested).

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