

# Human IL-6RA Protein; His Tag

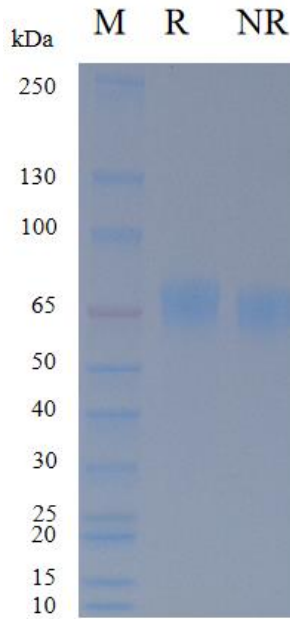
## Product Information

<b>Product Name</b>	Human IL-6RA Protein; His Tag
<b>Storage temp</b>	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
<b>Catalog# / Size</b>	<b>GM-88533RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-88533RP-1000 / 1 mg</b>

## Protein Information

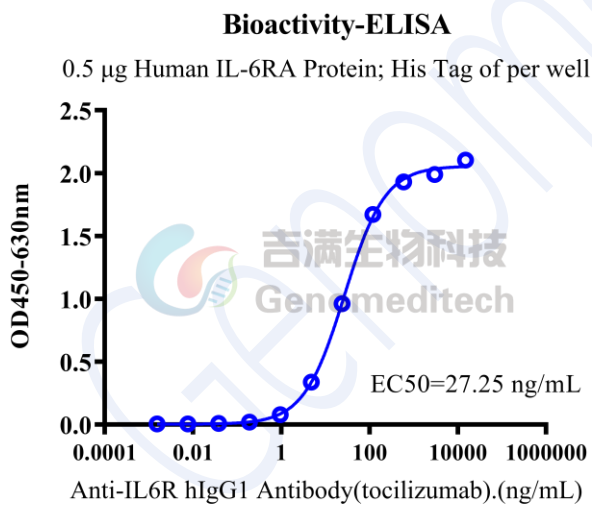
<b>Alternative Names</b>	CD126, IL-6R-1, IL-6RA, IL6RA, IL-6R-alpha, IL6RQ, gp80
<b>Source</b>	Human IL-6RA Protein; His Tag (GM-88533RP) is expressed from human 293 cells (HEK-293). It contains AA Leu 20 - Pro 365 (Accession # NP_000556.1). This protein carries a His tag at the C-terminus.
<b>Purity</b>	> 95% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	39.4 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
<b>Description</b>	<p>IL6RA (Interleukin-6 Receptor subunit alpha) is a membrane-bound receptor protein best known for mediating signaling of the cytokine interleukin-6 (IL-6). It is also referred to as CD126 and forms a receptor complex at the cell surface by binding IL-6. Through this interaction, IL6RA couples cellular IL-6 sensing to intracellular signal transduction, influencing immune regulation, acute-phase responses, and inflammation-related gene expression.</p> <p>In the canonical IL-6 signaling pathway, IL-6 first binds to IL6RA, and this complex then recruits the signal-transducing co-receptor gp130 (also called IL6ST). The resulting receptor assembly triggers activation of Janus kinases (JAKs), which phosphorylate tyrosine residues on gp130. These phosphorylated docking sites recruit and activate STAT transcription factors, leading to altered transcription of target genes. In addition, IL6 can also signal via "trans-signaling," where a soluble IL6RA (sIL6RA) associates with IL-6 and enables gp130 activation on cells that may not express membrane IL6RA.</p>

## SDS-PAGE



On SDS-PAGE under non-reducing (NR) condition and reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA



Human IL-6RA Protein; His Tag (Catalog # GM-88533RP) was immobilized at 5  $\mu$ g/ml (100  $\mu$ L/well). Increasing concentrations of Anti-IL6R hIgG1 Antibody(tocilizumab) (Catalog # GM-87897AB) were added.