RP01862

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# Recombinant Mouse IL-6RA/CD126 Protein

**Catalog No.: RP01862** Recombinant

## Sequence Information

| Species | Gene ID | Swiss Prot |
|---|---|---|
| Mouse | 16194 | P22272 |

**Tags**
C-His

**Synonyms**
IL-6 receptor subunit alpha; IL-6R subunit alpha; IL-6R-alpha; IL-6RA;CD126;Il6ra;Il6r

## Product Information

**Source** **Purification**
HEK293 cells

**Endotoxin**
< 0.01 EU/μg

**Formulation**
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

**Reconstitution**
Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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## Background

IL-6R alpha (IL-6RA) is a subunit alpha of IL-6 receptors, also shared by other interleukin receptors. IL-6RA is a type I transmembrane glycoprotein, which forms a complex with the type I transmembrane signal transducer Glycoprotein 130 (CD130) and regulates the biological activity of IL-6 with a low affinity. IL-6RA acts as IL-6 agonist and involves in JAK/STAT, MAPK, and Akt signaling pathway. IL-6RA has 2 isoform including mIL-6R (the longer one) or sIL-6R (the shorter one): The mIL-6R is membrane-bound interleukin-6 receptor, has the potential to drive naive CD4+ T cells to the Th17 lineage, through 'cluster signaling' by dendritic cells. The sIL-6R is soluble interleukin-6 receptor subunit, cleaved from IL-6RA in activated CD4+ T cells by proteolysis, and serves as IL-6 agonist. sIL-6R binds membrane-bound IL-6R and subunit IL6ST to activate regenerative and anti-inflammatory signal via IL-6 trans signaling and promotes pro-inflammatory properties of IL-6. The hydrolysis of IL-6R alpha is also called ectodomain shedding. IL-6RA involves in regulating cell growth and differentiation, and plays an important role in regulation of immune response, acute-phase reactions and hematopoiesis. However, IL-6RA shows tissue expression specificity in liver and some cells of the immune system, thus results a limitation of IL6 signaling. It's worth noting that IL-6RA dysregulation is implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases, and prostate cancer.

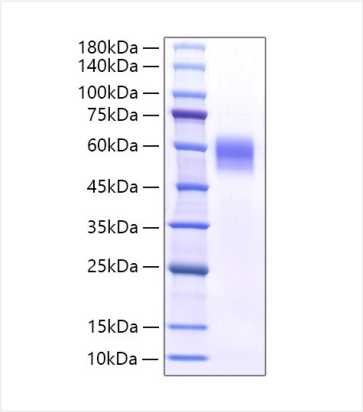
## Basic Information

**Description**
Recombinant Mouse IL-6RA/CD126 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu 20 - Glu 357) of Mouse Il6ra (Accession #NP_034689.2) fused with His tag at the C-terminus.

**Bio-Activity**

**Storage**
Store the lyophilized protein at -20°C to -80°C for 12 months.<br/>After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.
Avoid repeated freeze/thaw cycles.

## Validation Data




Recombinant Mouse IL-6RA/CD126 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 50-65 kDa.