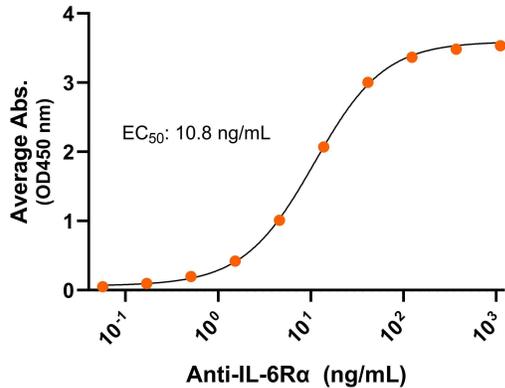


Bioactivity – Antibody Binding

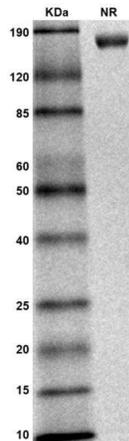
Mouse IL-6R α -His dimer, ELISA

0.2 μ g of IL-6R α protein dimer per well



Immobilized mouse IL-6R α protein dimer, His-tag (CSP-25224-01) at 2 μ g/mL (100 μ L/well) can bind anti-mouse IL-6R α monoclonal antibody with half maximal effective concentration (EC50) range of 5.4-21.5 ng/mL (QC tested).

SDS-PAGE



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

The migration range of the dimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.



Recombinant Mouse IL-6R α Protein Dimer, His Tag
Product Code: CSP-25224-01
For Research Use Only (RUO)

Expression Host
HEK293T

Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Protein Construct
IL-6R α dimer protein contains the IL-6R α extracellular domain (UniProt# P22272) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight
92 kDa. The migration range of the dimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.

Shipping Conditions
Frozen Dry Ice

Protein Name
IL6R

Alternate Name(s)
Cluster of Differentiation 126, CD126, IL6R, IL-6R-1, IL-6RA, IL6Q, IL6RA, IL6RQ, gp80, Interleukin-6 receptor, interleukin 6 receptor

Amino Acid Range
AA: L20-P364

Formulation
0.22 μ m filtered PBS, pH 7.4

Stability & Storage
-80 $^{\circ}$ C

Background

Interleukin 6 receptor alpha (IL-6R α) is a Type 1 transmembrane protein and Type 1 cytokine receptor and plays a crucial role in immune response, inflammation, and hematopoiesis. IL-6R α is also known as Cluster of Differentiation 126 (CD126), IL6R, CD126, IL-6R-1, IL-6RA, IL6Q, IL6RA, IL6RQ, and gp80. IL-6R α 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 α binding to its ligand interleukin 6 (IL-6) results in homodimerization and subsequent association with IL-6R β (gp130) dimer resulting in higher order complexes. IL-6R α is involved in multiple disease processes due to its central role in IL-6 signaling. Dysregulation of IL-6R α is implicated in many cancers and autoimmune diseases. While structurally and functionally similar to mouse IL-6R α , mouse IL-6R α is a species-specific tool essential for preclinical studies, basic research and translational research in cancer immunotherapy.