

# Rat Anti-Mouse IL-6R Monoclonal antibody, clone 15A7 (CABT-L4297)

This product is for research use only and is not intended for diagnostic use.

#### **PRODUCT INFORMATION**

# Product OverviewThe 15A7 monoclonal antibody reacts with the mouse IL-6 receptor α chain also known as<br/>CD126. CD126 is an 80 kDa type I cytokine receptor and a member of the immunoglobulin<br/>superfamily. CD126 is expressed by activated T and B lymphocytes, monocytes, hepatocytes,<br/>and plasma cells. The IL-6 receptor α chain binds IL-6 but requires association with gp130 to<br/>initiate signal transduction. Upon IL-6 binding the IL-6R complex influences antigen-specific<br/>immune responses, inflammatory responses, neuronal development, and is a major mediator of<br/>the acute phase reaction. The 15A7 monoclonal antibody has been shown to block the binding<br/>of IL-6 to the IL-6 receptor.

| Target             | Mouse IL-6R  |
|--------------------|--|
| Immunogen          | OKT-4 hybridoma cells  |
| Isotype            | lgG2b, к   |
| Source/Host        | Rat  |
| Species Reactivity | Mouse  |
| Clone              | 15A7   |
| Purification       | Protein A High Salt purified.<br>Purity>95%. Determined by SDS-PAGE                              |
| Conjugate          | Functional Grade   |
| Applications       | in vivo blocking of IL-6/IL-6R signaling, in vitro blocking of IL-6R signaling                   |
| Molecular Weight   | 150 kDa  |
| Format             | 0.2 $\mu$ M filtered liquid. Purified from tissue culture supernatant in an animal free facility |

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| Concentration | Lot specific  |
|---------------|---|
| Size          | 5 mg  |
| Buffer        | PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]                                       |
|               | Endotoxin level: <2EU/mg (<0.002EU/ $\mu$ g). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04   |
| Preservative  | None  |
| Storage       | The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze. |
| Ship          | Wet ice   |

### BACKGROUND

| Introduction | This is an antibody fragment consisting of a single monomeric variable antibody domain directed to IL6R. Nanobody, with a molecular weight of only 12–15 kDa, is able to bind selectively to a specific antigen like a whole antibody. |
|--------------|--|
| Keywords     | IL6R;interleukin 6 receptor;interleukin-6 receptor subunit alpha;CD126;IL-6R 1;CD126<br>antigen;membrane glycoprotein 80;IL-6 receptor subunit alpha;gp80;IL6RA;IL-6RA;IL-6R-<br>1;MGC104991   |

## **GENE INFORMATION**

| Official Symbol | interleukin 6 receptor  |
|-----------------|---|
| 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 |
| References      | Tsukamoto, H., et al. (2015). "IL-6-mediated environmental conditioning of defective Th1 differentiation dampens antitumour immune responses in old age." Nat Commun 6: 6702. PubMed;             |