

IL-6R / CD126 Neutralizing Antibody



Sino Biological
Biological Solution Specialist

Catalog Number: 10398-MM08

General Information	
Immunogen:	Recombinant Human IL-6R / CD126 protein (Catalog#10398-H08H)
Clone ID:	3H7D3H1
Ig Type:	Mouse IgG1
Applications:	Neutralization
Specificity:	Human IL-6R / CD126
Formulation:	0.2 µm filtered solution in PBS
Storage:	< -20°C

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human IL-6R / CD126 (rh IL-6R / CD126; Catalog#10398-H08H; NP_000556.1; Met1-Pro365). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

Specificity

Human IL-6R / CD126

No cross-reactivity with rat IL6R (Catalog#81072-R02H), mouse IL6R (Catalog#50280-M08H) and canine IL6R (Catalog#70117-D08H) in ELISA assay

Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. **Preservative-Free**.

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles**.

Background

Interleukin 6 receptor (IL-6R) also known as CD126 (Cluster of Differentiation 126) is a type I cytokine receptor. The low concentration of a soluble form of IL-6 receptor (sIL-6R) acts as an agonist of IL-6 activity. In the IL-6R/CD126/IL6R system, both a membrane-bound IL-6R and a sIL-6R protein are able to mediate IL-6 signals into the cells through the interaction of gp130. The resulting IL-6/sIL-6R protein complex is also capable of binding to gp130 and inducing intracellular signalling. Through this so-called 'trans-signalling' mechanism, IL-6 is able to stimulate cells that lack an endogenous mIL-6R. High levels of IL-6 and sIL-6R have been reported in several chronic inflammatory and autoimmune diseases as well as in cancer.

Reference

Barill S, et al. (2000) The role of interleukin-6 and interleukin-6/interleukin-6 receptor-alpha complex in the pathogenesis of multiple myeloma. *Eur Cytokine Netw.* 11 (4): 546-51.

Kang KW, et al. (2007) Novel role of IL-6/SIL-6R signaling in the expression of inducible nitric oxide synthase (iNOS) in murine B16, metastatic melanoma clone F10.9, cells. *Free Radic Biol Med.* 42 (2): 215-27.

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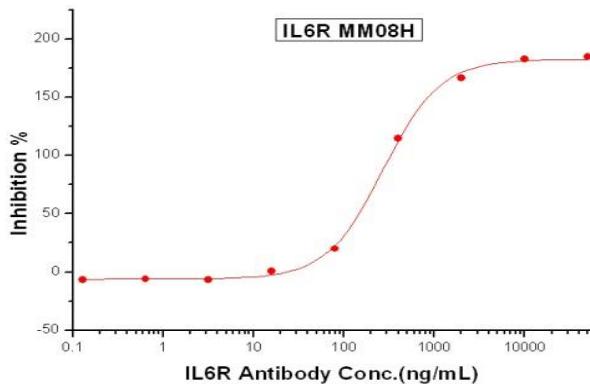
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Applications

Block - This IL6R Neutralizing Antibody can not block the binding of recombinant IL6 (Catalog#10395-HNAE) to its recombinant receptor IL6 Ra (Catalog#10398-H08H).

Neutralization - The neutralization activity of IL6R Neutralizing Antibody is measured by its ability to neutralize IL6 Ra-mediated inhibition of proliferation in the M1 mouse myeloid leukemia cell line. The Neutralization Titer (IC50) is typically 0.15-0.6 μ g/mL in the presence of 50 ng/mL Recombinant Human IL6 Ra (Catalog#10398-H08H) and 100 ng/mL Recombinant Human IL6 (Catalog#10395-HNAE).



IL-6 Ra Enhancement of IL6-dependent Inhibition of Cell Proliferation was Neutralized by Human IL-6 Ra Neutralizing Antibody in the M1 mouse myeloid leukemia cell line. Enhancement of Recombinant Human IL6 (100 ng/mL) activity elicited by Recombinant Human IL-6 Ra (50 ng/mL) is neutralized by increasing concentrations of Human IL6 Ra neutralizing Monoclonal Antibody (Catalog#10398-MM08H). The IC50 is typically 0.15-0.6 μ g/mL.