

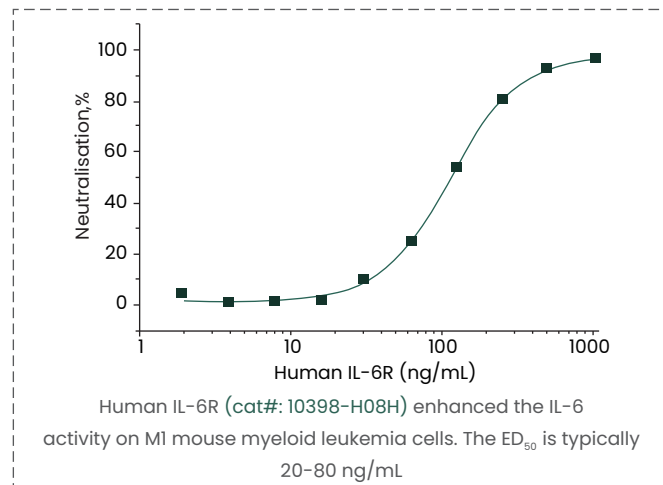
# IL-6: Pivotal Pleiotropic Inflammatory Cytokine

IL-6 is a pleiotropic cytokine. Elevated IL6 is observed in patients with microbial infections and other inflammation conditions. The serum level of IL6 is often correlated with the severity of the inflammation.






The pro-inflammatory function of IL-6 is regulated by a trans-signaling process involving soluble IL-6R (sIL-6R) and gp130 receptor. The production of sIL6R is activated by IL-1beta and TNF-alpha. These two pro-inflammatory cytokines induce the proteolytic cleavage of IL6R by activating ADAM10 and ADAM17.

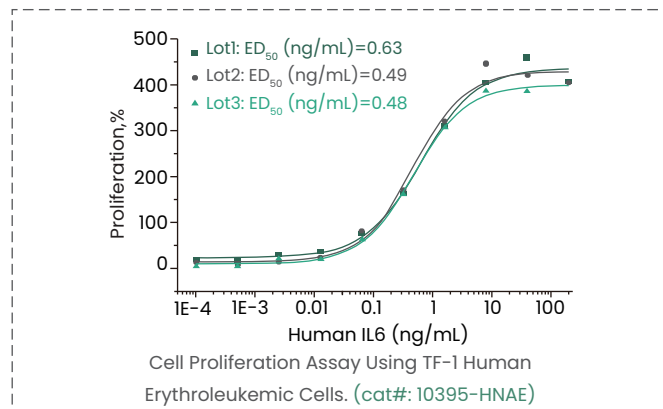
Unlike most other soluble receptors (e.g. IL-1RA and IL-18BP), sIL-6R is NOT an inhibitor of IL-6. Instead, it activates IL6 signaling by forming a complex with IL6 and gp130.

In addition, IL6 can transduce its signal through membrane-bound IL6R. This signal transduction also requires gp130 to be the co-receptor.



## Bioactive Recombinant IL-6 from Multiple Species

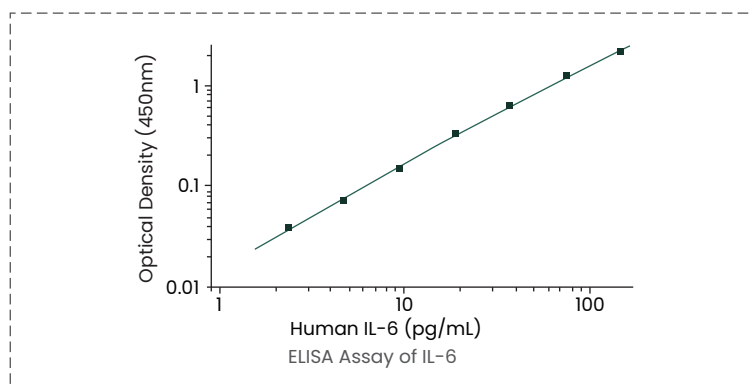
<p><b>Human IL-6:</b> </p> <p>10395-HNAE Activity: Bind to Human IL-6R Cell proliferation</p>	<p><b>Mouse IL-6:</b> </p> <p>50136-MANE Activity: Cell proliferation</p>	<p><b>Human IL-6:</b> </p> <p>80076-RNAE Activity: Cell proliferation</p>
<p><b>Mouse IL-6:</b> </p> <p>90197-CNAE Activity: Cell proliferation</p>	<p><b>Sus scrofa (Pig) IL-6:</b> </p> <p>80076-RNAE Activity: Bind to Human IL-6R(10398-H08H)</p>	



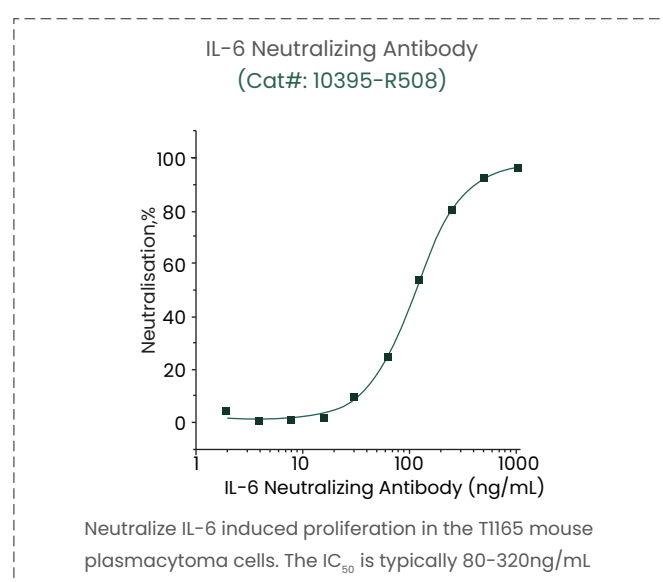
## ELISA Detection Pairs for IL-6

Sino biological has developed high sensitivity ELISA antibody pairs for detection of IL-6 and IL-6R.

Target	Carture Antibody	Detection Antibody
IL-6	10395-MM14	10395-MM72



## Neutralization Antibodies for IL-6



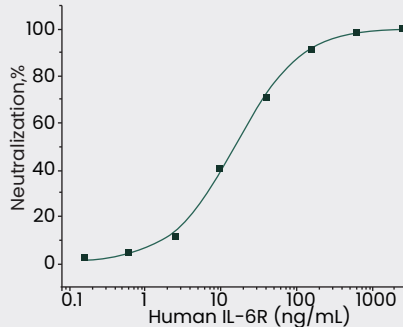
## Recombinant Membrane-bound IL-6 Receptor: IL-6R

IL-6 demonstrates limited cross-species bioactivity. Human IL-6 can bind to both human and mouse IL-6R, but mouse IL-6 can only bind to mouse IL-6R.

10398-H08H



Bind to Human IL-6;  
Enhance the IL6 activity on M1 mouse myeloid leukemia cells

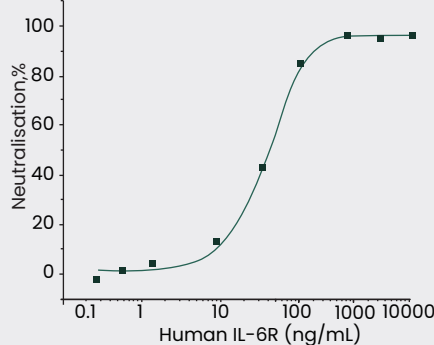


Enhanced the IL-6 activity on M1 mouse myeloid leukemia cells. The ED<sub>50</sub> is typically 20-80 ng/mL.

10398-H02H



Bind to Human IL-6;  
Enhance the IL6 activity on M1 mouse myeloid leukemia cells



Enhanced the IL-6 activity on M1 mouse myeloid leukemia cells. The ED<sub>50</sub> is typically 30-120 ng/mL.

50280-M08H



70117-D08H



Bind to Human IL-6

81072-R08H



Bind to Human IL-6

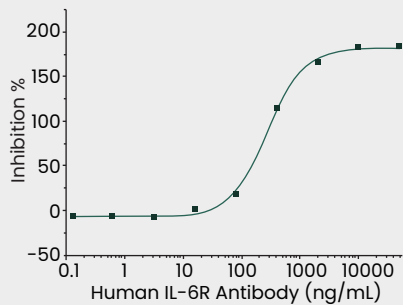
90324-C08H



Bind to Human IL-6

Note: H: Human; R: Rat; M: Mouse; C: Canine; Rh: Rhesus

## Neutralization Antibodies for IL-6R



IL-6R Neutralizing Antibody  
(Cat#: 10398-MM08)

IL-6-dependent inhibition of cell proliferation is neutralized by Human IL-6R neutralizing Monoclonal Antibody. The IC<sub>50</sub> is typically 0.15-0.6 µg/mL.

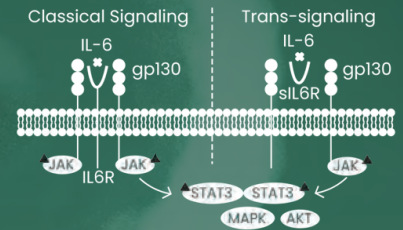
## Recombinant gp130

Gp130 is a common receptor and signal transducer shared by most IL-6 family cytokines.

Cat#	Species	Expressed Host	Tag	Activity
50135-M02H	Mouse	HEK293 Cells	Fc	Bind to IL-6
50135-M08H	Mouse	HEK293 Cells	His	Bind to mouse IL11Ra; Inhibit the IL-6Ra enhancement of IL-6 activity on M1 mouse myeloid leukemia cell
10974-H03H	Human	HEK293 Cells	Fc & His	
50135-M03C	Mouse	CHO Cells	Fc & His	
50135-M03H	Mouse	HEK293 Cells	Fc & His	Inhibit the IL-6Ra enhancement of IL-6 activity on M1 mouse myeloid leukemia cell
80030-R06H	Rat	HEK293 Cells	Fc & His	
80030-R08H	Rat	HEK293 Cells	His	

SB Sino Biological

## Receptors of IL-6



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