

Mouse gp130 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF468

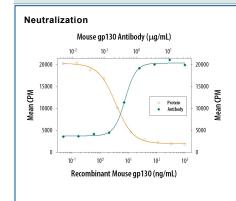
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse gp130 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human gp130 is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse gp130 Gln23-Glu617 Accession # Q6PDI9	
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	Recombinant Mouse gp130 Fc Chimera (Catalog # 468-MG)
Flow Cytometry	2.5 µg/10 ⁶ cells	M1 mouse myeloid leukemia cell line
Neutralization	Measured by its ability to neutralize IL-6-induced inhibition of proliferation in the M1 mouse myeloid leukemia cell line. Saito, T. <i>et al.</i> (1991) J. Immunol. 147 :168. The Neutralization Dose (ND ₅₀) is typically 0.3-1.0 μg/mL in the presence of 20 ng/mL Recombinant Human II -6	

DATA



IL-6 Inhibition of Cell Proliferation and Neutralization by Mouse gp130 Antibody. Recombinant Human IL-6 (Catalog # 206-IL) inhibits proliferation in the the M1 mouse myeloid leukemia cell line in a dose-dependent manner (orange line). Activity elicited by Recombinant Human IL-6 (20 ng/mL) is neutralized (green line) by increasing concentrations of Mouse gp130 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF468). The ND₅₀ is typically 0.3-1.0 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	 12 months from date of receipt, -20 to -70 °C as supplied. 	

- 1 month from date of receipt, 2 to 8 °C, reconstituted.
- 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

Gp130, the common signal transducing receptor component shared by the functional receptor complexes of the IL-6 family of cytokines, belongs to the class I cytokine receptor family. Binding of IL-6 (IL-11) to either the membrane-anchored or soluble IL-6 R (IL-11 R) initiates the association of IL-6 R (IL-11 R) with gp130 which then undergoes homo-dimerization and signal transduction. With other IL-6 family cytokines, such as LIF and OSM, signal transduction is triggered by the hetero-dimerization of gp130 and LIF R or OSM R.

Gp130 is expressed in all organs examined. Soluble gp130, which apparently arises either from proteolytic cleavage of the membrane-bound receptor or from alternative splicing, has been detected in human serum. The *in vivo* functions of soluble gp130 are not clearly understood. In *in vitro* experiments, natural or recombinant soluble gp130 has been shown to have inhibitory effects on OSM and CNTF activities.

References:

- 1. Narazaki, M. et al. (1993) Blood 82:1120.
- 2. Taga, T. and T. Kishimoto (1997) Annu. Rev. Immunol. 15:797.

RED SYSTEMS*