

# Mouse gp130 Antibody

Monoclonal Rat IgG<sub>2A</sub> Clone # 125623 Catalog Number: MAB4681

DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse gp130 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human gp130 is observed.	
Source	Monoclonal Rat IgG <sub>2A</sub> Clone # 125623	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse gp130 Gln23-Glu617 (predicted) 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. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.	

## **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
Flow Cytometry	2.5 μg/10 <sup>6</sup> cells	M1 mouse myeloid leukemia cell line
Immunocytochemistry	8-25 μg/mL	See Below

## DATA

# Immunocytochemistry 100.0 µm

ap130 in M1 Mouse Cell Line. gp130 was detected in immersion fixed M1 mouse myeloid leukemia cell line using Rat Anti-Mouse gp130 Monoclonal Antibody (Catalog # MAB4681) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells

PREPARATION AND STORAGE		
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C	
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, 2 to 8 °C under sterile conditions after reconstitution.  6 months, -20 to -70 °C under sterile conditions after reconstitution.	

# 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.

