

**DESCRIPTION**

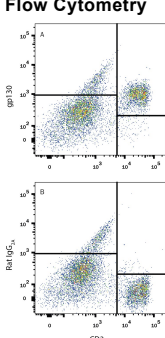
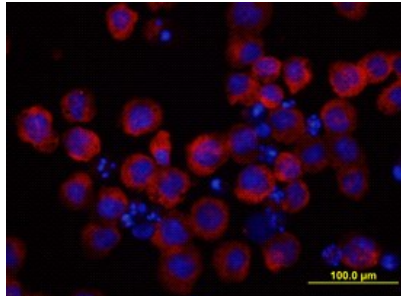
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | Detects mouse gp130 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human gp130 is observed.   |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 125623   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse gp130<br>Gln23-Glu617 (predicted)<br>Accession # Q6PDI9   |
| <b>Endotoxin Level</b>    | <0.10 EU per 1 µg of the antibody by the LAL method.  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*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.

|                            | <b>Recommended Concentration</b>   | <b>Sample</b> |
|----------------------------|--|---------------|
| <b>Flow Cytometry</b>      | 0.25 µg/10 <sup>6</sup> cells  | See Below     |
| <b>Immunocytochemistry</b> | 8-25 µg/mL   | See Below     |
| <b>CyTOF-ready</b>         | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. |               |

**DATA**

|  |   |
|--|---|
| <p><b>Flow Cytometry</b></p>  <p><b>Detection of gp130 in Mouse Splenocytes by Flow Cytometry.</b><br/>Mouse splenocytes were stained with Rat Anti-Mouse CD3 PE-conjugated Monoclonal Antibody (Catalog # FAB4841P) and either (A) Rat Anti-Mouse gp130 Monoclonal Antibody (Catalog # MAB4681) or (B) Rat IgG<sub>2A</sub> Isotype Control (Catalog # MAB006) followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). View our protocol for <a href="#">Staining Membrane-associated Proteins</a>.</p> | <p><b>Immunocytochemistry</b></p>  <p><b>gp130 in M1 Mouse Cell Line.</b><br/>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™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counter-stained with DAPI (blue). View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p> |
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**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

**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.