Human gp130 Antibody

Polyclonal Goat IgG

Catalog Number: AB-228-NA

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human gp130 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Protein A or G purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human gp130 Leu24-Glu619 (Glu619Asp) Accession # P40189
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.

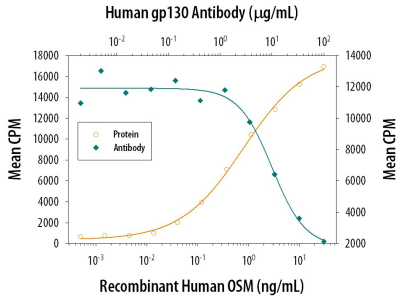
APPLICATIONS

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	1 µg/mL	Recombinant Human gp130 (Catalog # 228-GP)
Neutralization	Measured by its ability to neutralize Oncostatin M/OSM-induced proliferation in the TF-1 human erythroleukemic cell line. Kitamura, T. *et al.* (1989) J. Cell Physiol. **140**:323. The Neutralization Dose (ND_{50}) is typically 20–40 µg/mL in the presence of 0.8 ng/mL Recombinant Human Oncostatin M/OSM.	

DATA

Neutralization



Cell Proliferation Induced by Oncostatin M/OSM and Neutralization by Human gp130 Antibody. Recombinant Human Oncostatin M/OSM (Catalog # 295-OM) stimulates proliferation in the TF-1 human erythroleukemic cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human Oncostatin M/OSM (0.8 ng/mL) is neutralized (green line) by increasing concentrations of Human gp130 Polyclonal Antibody (Catalog # AB-228-NA). The ND_{50} is typically 20–40 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 1 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, 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. At the present time, 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.