

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse gp130 protein			
	Mouse gp130 (Gln23-Glu617) Accession # Q6PDI9	DIEGRMD	Human IgG ₁ (Pro100-Lys330)	6-His tag
	N-terminus		C-terminus	
N-terminal Sequence Analysis	No results obtained: Gln23 predicted			
Structure / Form	Disulfide-linked homodimer			
Predicted Molecular Mass	94 kDa (monomer)			

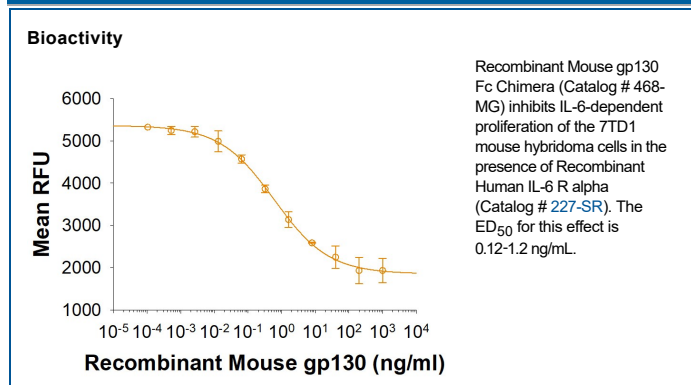
SPECIFICATIONS

SDS-PAGE	115 kDa, reducing conditions
Activity	Measured by its ability to inhibit IL-6-dependent proliferation of the 7TD1 mouse hybridoma cells in the presence of Recombinant Human IL-6 R α (Catalog # 227-SR). The ED ₅₀ for this effect is 0.12-1.2 ng/mL.
Endotoxin Level	<1.0 EU per 1 μ g of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 μ g/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. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



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 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.