

# Mouse IL6ST / gp130 / CD130 Protein (His Tag)

Catalog Number: 50135-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

5133400A03Rik; AA389424; BB405851; CD130; D13Erted699e; gp130

### Protein Construction:

A DNA sequence encoding the mouse gp130 (NP\_034690.3) extracellular domain (Met 1-Glu 617) was fused with a polyhistidine tag at the C-terminus.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Bio Activity:

**1. Measured by its ability to bind mouse IL11Ra in a functional ELISA. 2. Measured by its ability to inhibit the IL-6R $\alpha$  enhancement of IL-6 activity on M1 mouse myeloid leukemia cells. The ED<sub>50</sub> for this effect is typically 0.6-3  $\mu$ g/mL in the presence of 50 ng/mL recombinant human IL-6sR and 100 ng/mL recombinant human IL-6.**

### Endotoxin:

< 1.0 EU per  $\mu$ g of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Glu 19

### Molecular Mass:

The secreted recombinant mouse gp130 consists of 606 amino acids and has a predicted molecular mass of 68 kDa. As a result of glycosylation, the apparent molecular mass of rm gp130 is approximately 80-90 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

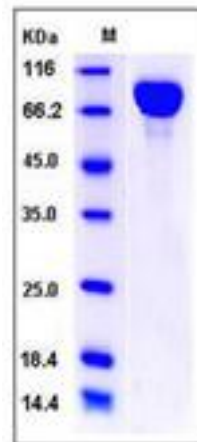
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Glycoprotein 130 (also known as gp130, IL6ST, IL6-beta or CD130) is a transmembrane protein which is the founding member of the class of all cytokine receptors. CD130/gp130 is a signal transducer shared by many cytokines, including interleukin 6 (IL6), ciliary neurotrophic factor (CNTF), leukemia inhibitory factor (LIF), and Oncostatin M (OSM). CD130/gp130 functions as a part of the cytokine receptor complex. The activation of this protein is dependent upon the binding of cytokines to their receptors. CD130/gp130 plays a critical role in regulating myocyte apoptosis. Alternatively spliced transcript variants encoding distinct isoforms have been described. A related pseudogene has been identified on chromosome 17. The receptor systems for IL6, LIF, OSM, CNTF, IL11, CTF1 and BSF3 can utilize gp130 for initiating signal transmission. CD130/gp130 binds to IL6/IL6R (alpha chain) complex, resulting in the formation of high-affinity IL6 binding sites, and transduces the signal. CD130/gp130 may have a role in embryonic development. The type I OSM receptor is capable of transducing OSM-specific signaling events.

## References

- 1.Hibi, *et al.* (1990) Molecular cloning and expression of an IL-6 signal transducer, gp130. *Cell*. 63 (6): 1149-57.
- 2.Kim H, *et al.* (1997) Transmembrane domain of gp130 contributes to intracellular signal transduction in hepatic cells. *J Biol Chem*. 272 (49): 30741-7.
- 3.Giordano V, *et al.* (1997) Shc mediates IL-6 signaling by interacting with gp130 and Jak2 kinase. *J Immunol*. 158 (9): 4097-103.

**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

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