Human IL6ST / gp130 / CD130 Protein (His & Fc Tag)

Catalog Number: **10974-H03H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD130; CDW130; GP130; IL-6RB

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Ile 618) of human IL6ST (NP_002175.2) precursor was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its ability to inhibit the IL6 Rα enhancement of IL6 activity on M1 mouse myeloid leukemia cells (Saito, T. et al. 1991, J. Immunol. 147:168.). The ED_{50} for this effect is typically 0.05-0.15 μg/ml in the presence of 50 ng/ml recombinant human IL6sR and 100 ng/ml recombinant human IL6.
2. Measured by its ability to inhibit the IL-6Rα enhancement of IL-6 activity on M1 mouse myeloid leukemia cell. The ED_{50} for this effect is typically 0.2-0.8 μg/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 μg of the protein as determined by the LAL method

Stability:

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

Predicted N terminal: Glu 23

Molecular Mass:

The recombinant human IL6ST/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer consists of 844 amino acids and has a predicted molecular mass of 96 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh IL6ST/Fc monomer is approximately 125-140 kDa due to glycosylation.

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

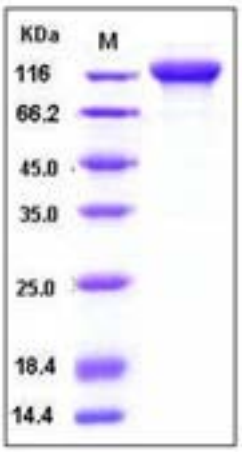
Storage: Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.