

For Research Use Only

Recombinant Human gp130/IL6ST protein (His Tag)



Catalog Number: Eg0654

Basic Information

Species:
Human

Purity:
>95 %, SDS-PAGE

Tag:
His Tag

EC50:
90-370 ng/mL

Technical Specifications

Purity:
>95 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Human gp130 protein Glu23-Ile618 (Accession# P40189-1) with a His tag at the C-terminus.

GeneID:
3572

Accession:
P40189-1

Predicted Molecular Mass:
68.5 kDa

SDS-PAGE:
80-100 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human gp130 (His tag) at 1 μ g/mL (100 μ L/well) can bind Human IL-6R alpha (Myc tag, His tag) with a linear range of 90-370 ng/mL.

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Glycoprotein 130 (gp130, also known as IL6ST, CD130 or IL6-beta) is a ubiquitously expressed, signal-transducing receptor that serves as the signal transduction unit for IL-6 family of cytokines, including IL-6, IL-11, IL-27, leukemia inhibitory factor (LIF), OSM, ciliary neurotrophic factor (CNTF), cardiotrophin 1 (CT-1), and cardiotrophin-like cytokine (CLC). These cytokines signal through the gp130/Jak/STAT pathway. Binding of IL-6 to IL-6R induces gp130 homodimerization and formation of a high-affinity receptor complex, which activates Jaks. That causes phosphorylation of gp130 tyrosine residues which in turn activates STAT3. gp130 is a type I transmembrane protein, and can also exist as a soluble form (sgp130). sgp130 binds to sIL-6R/IL-6 complexes and prevents their interactions with membrane-anchored gp130 on target cells.

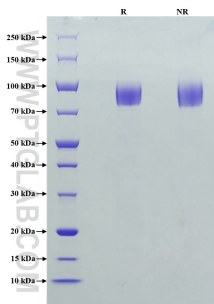
References

1. Taga T, Kishimoto T. (1997). Annu Rev Immunol. 15:797-819.
2. Montero-Julian FA, et al. (1997). Clin Cancer Res. 3(8):1443-1451.
3. Heinrich PC, et al. (1998). Biochem J. 334 (Pt 2):297-314.
4. Silver JS, Hunter CA. (2010). J Leukoc Biol. 88(6):1145-1156.

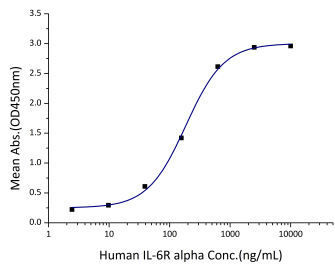
Synonyms

gp130/IL6ST, IL6ST, CD130, Glycoprotein 130, GP130

Selected Validation Data



Purity of Recombinant Human gp130 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



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