



# Recombinant Protein Technical Manual

## Recombinant Human IL6ST/CD130 Protein (His & Fc Tag)(Active)

RPES4753

### Product Data:

**Product SKU:** RPES4753

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_002175.2

### Protein Information:

**Molecular Mass:** 96 kDa

**AP Molecular Mass:** 12540 kDa

**Tag:** C-His & Fc

**Bio-activity:** 1. Measured by its ability to bind human IL11Ra in a functional ELISA. 2. 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 ED50 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.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** CD130;CDW130;GP130;IL-6RB

## Immunogen Information:

**Sequence:** Met 1-Ile 618

## Background:

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.