

DESCRIPTION

Source *Spodoptera frugiperda*, Sf 21 (baculovirus)-derived
Leu24-Glu619 (Glu619Asp)
Accession # P40189

N-terminal Sequence Analysis Leu24

Predicted Molecular Mass 68 kDa

SPECIFICATIONS

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 ED₅₀ for this effect is 0.5-2 μ g/mL in the presence of 4 μ g/mL recombinant human (rh) IL-6 R α and 25 pg/mL rhIL-6.

Endotoxin Level <1.0 EU per 1 μ g of the protein by the LAL method.

Purity >95%, 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 with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 μ g/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

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.**

- 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.

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. At the present time, the *in vivo* functions of soluble gp130 are not clearly understood. In *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.