

Product No. G-7534
gp 130 Soluble Peptide
Human, Recombinant
Expressed in *Sf*21 insect cells

Description

The IL-6 receptor consists of two polypeptide chains, a ligand-binding chain (IL-6R) and a non-ligand binding, signal-transducing chain (gp130).¹ Interaction of IL-6 with IL-6R triggers the association of gp130 and IL-6R, and the signal can be transduced through gp130.² gp130 also functions as a signal transducer for oncostatin M, leukemia inhibitory factor, ciliary neurotropic factor and interleukin-11. Recombinant, human gp130 soluble peptide inhibits soluble IL-6-mediated IL-6 activity. In addition, soluble gp130 inhibits the bioactivity of oncostatin M and ciliary neurotropic factor.³

Performance Characteristics

The biological activity of recombinant, human gp130 is measured by its ability to inhibit the interleukin-6 soluble peptide (IL-6sR) enhancement of IL-6 activity on the M1 mouse myeloid leukemia cell line.⁴ The EC₅₀ is defined as the effective concentration of soluble peptide that elicits a 50% inhibition in IL-6 action in a cell based bioassay.

Product Information

Expressed in *Sf*21 insect cells
Molecular Weight: 68 kD
Purity: ≥ 95% as determined by SDS-PAGE
EC₅₀: 0.2 - 2.0 µg/ml
Package Size: 10 µg/vial
Formulation: Lyophilized from a 0.2 µm-filtered solution of phosphate buffered saline, pH 7.4.
Carrier Protein: 500 µg of bovine serum albumin
Sterility: 0.2 µm-filtered, aseptic fill
Endotoxin: ≤0.1 ng/µg gp130

Reconstitution and Use

Reconstitute the contents of the vial using 0.2 µm-filtered phosphate buffered saline containing 0.1% HSA or BSA to a concentration not less than 10 µg/ml.

Storage

Prior to reconstitution, store at -20°C for no more than 6 months. After reconstitution, store at 2-8°C for a maximum of one month. For extended storage, freeze in working aliquots at -70°C or -20°C. Repeated freezing and thawing is not recommended.

References

1. Carpenter, G., et al., *Annu. Rev. Biochem.*, **48**, 193 (1979).
2. Gregory, H., *Nature*, **257**, 325 (1975).
3. George-Nascimento, C., *Biochemistry*, **27**, 797 (1988).
4. Todaro, G., et al., *Proc. Natl. Acad. Sci. USA*, **77**, 5258 (1980).
5. Blomquist, M., et al., *Proc. Natl. Acad. Sci. USA*, **81**, 7363 (1984).
6. Eppstein, D., et al., *Nature*, **318**, 663 (1985).