



Recombinant Human soluble IL-6 R alpha

20200923BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	S01-045
Size:	20 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	16194
Synonyms:	soluble IL-6 receptor alpha, B cell stimulatory factor-2, CD126

IL-6 mediates its biological effects through the type I IL-6 receptor system that consists of two chains, IL-6R α and gp130. While the IL-6R α chain is the binding component specific to IL-6, the gp130 chain only transmits signals of IL-6 when bound to IL-6R α . The gp130 can also transmit signals from LIF, OSM, CNTF, IL-11 and CT-1 in conjunction with other receptor subunits. The low-affinity binding site for IL-6 is composed of IL-6R α alone. IL-6R α is expressed in a wide range of cells, including T cells, fibroblasts and macrophages. Soluble IL-6R α , which consists of only the extracellular domain of the IL-6R α chain, acts as an agonist of IL-6 activity at low concentrations. CHO cell-derived Recombinant Human sIL-6 Receptor α is a 37.9 kDa glycoprotein corresponding to 339 amino acid residues of the extracellular domain of IL-6R α . As a result of glycosylation, Recombinant Human sIL-6 Receptor α migrates with an apparent molecular mass of approximately 57-70 kDa by SDS-PAGE gel, under reducing conditions.

Sequence

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LAPRRCPAQE VARGVLTSLP GDSVTLTCPG VEPEDNATVH
WVLRKPAAGS HPSRWAGMGR RLLLRVQLH DSGNYSCYRA
GRPAGTVHLL VDVPPEEPQL SCFRKSPLSN VVCEWGPST
PSLTTKAVLL VRKFQNSPAE DFQEPQYSQ ESQKFSCQLA
VPEGDSSFYI VSMCVASSVG SKFSKTQTFQ GCGILQDPP
ANITVTAVAR NPRWLSVTWQ DPHSWNSSFY RLRFELRYRA
ERSKTFTTWM VKDLQHHCVI HDAWSGLRHV VQLRAQEEFG
QGEWSEWSPE AMGTPWTESR SPPAENEVST PMQALTNKND
DDNILFRDSA NATSLPVQD
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Database References

Protein RefSeq:	NP_000556.1
Uniprot ID:	P08887
mRNA RefSeq:	NM_000565.3

Product Specifications

Expressed in	CHO cells
Purity	> 95% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng/µg of protein (<1EU/µg).
Formulation	Lyophilized (10mM Sodium Phosphate, pH 6.0)
Length (aa):	339
MW:	57-70 kDa (reducing conditions)

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 3 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Determined by its ability to intensify the IL-6 induced growth inhibition of mouse M1 cells. The expected ED₅₀ is ≤ 5.0 ng/ml, in the presence of 20 ng/ml of rhIL-6.