



## **Overview**

Synonyms	gp80
Description	Interleukin-6 Receptor (IL-6R) is a single trans-membrane protein that is the receptor for Interleukin-6 (IL-6). IL-6R forms a hexameric complex upon binding 2 molecules of IL-6 and two molecules of glycoprotein 130 (gp130) which activates intracellular JAK/STAT pathways. Although the normal form of IL-6R is the membrane-bound 80 kDa subunit, a soluble form of IL-6R (sIL-6R) can be generated physiologically by limited proteolysis or alternative splicing. sIL-6R binds to both IL-6 and gp130 generating intracellular signaling. In the immune system, sIL-6R is produced by both naïve and memory CD4 T-cells and strongly augments IL-6 ligand's induction of Th-17 cells. <b>Recombinant human Soluble IL-6 Receptor Alpha (rhsIL-6R alpha)</b> with an N-terminal His tag produced in <i>Sf9 insect cells</i> is a single glycosylated polypeptide chain containing 350 amino acids. A fully biologically active molecule, rhsIL-6R alpha has a molecular mass of 50kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.
Accession No	P08887
Species	Human
Source	Sf9 insect cells
<b>Biological Activity</b>	$ED_{50} < 50$ mg/mL, measured by the cytotoxicity assay using M1 cells in presence of 10 ng/mL of human IL-6, corresponding to a specific activity of > 2×10 <sup>4</sup> units/mg.
Sequence	HHHHHHDDDDKLAPRRCPAQEVARGVLTSLPGDSVTLTCPGVEPEDNATVHWVLRKPAAGSHPSRWAGMGRRLLLRSVQLHDSGNYSCYRAGRPAGTVHLLVDVPPEEPQLSCFRKSPLSNVVCEWGPRSTPSLTTKAVLLVRKFQNSPAEDFQEPCQYSQESQKFSCQLAVPEGDSSFYIVSMCVASSVGSKFSKTQTFQGCGILQPDPPANITVTAVARNPRWLSVTWQDPHSWNSSFYRLRFELRYRAERSKTFTTWMVKDLQHHCVIHDAWSGLRHVVQLRAQEEFGQGEWSEWSPEAMGTPWTESRSPPAENEVSTPMQALTTNKDDDNILFRDSANATSLPVQD

## **Properties**

Measured Molecula Weight	<sup>r</sup> 50 kDa, observed by reducing SDS-PAGE.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH2O at 100 µg/mL.
Endotoxin Level	< 0.2 EU/µg, determined by LAL method.
Storage	Lyophilized <b>recombinant human Soluble IL-6 Receptor Alpha (rhsIL-6R alpha)</b> remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhsIL-6R alpha remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.
Note	For research use only

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