# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 20-365aa

**UniProt No.** P08887

NCBI Accession No. NP\_000556

# **Alternative Names**

Interleukin-6 receptor subunit alpha, IL-6 receptor subunit alpha, IL-6R subunit alpha, IL-6R 1, Membrane glycoprotein 80, gp80, CD126

# **Additional Information**

ATGP3819 has been replaced with a catalog number ATGP3919.

# **PRODUCT SPECIFICATION**

# **Molecular Weight**

39.6 kDa (355aa)

**Concentration** 0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

**Purity** > 90% by SDS-PAGE

### **Endotoxin level**

< 1 EU per 1ug of protein (determined by LAL method)

### **Biological Activity**

Measured by its ability to inhibit proliferation using M1 mouse myeloid leukemia cells. The ED50 range  $\leq$ 20ng/ml with Human IL-6.

**Tag** His-Tag

**Application** SDS-PAGE, Bioactivity

# **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



# BACKGROUND

### Description

IL-6R alpha, also known as interleukin-6 receptor subunit alpha isoform 1, is a type I cytokine receptor. It is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in immune response. It has a modular build of several immunoglobulin-like and fibronectin type III-like domains. The low concentration of a soluble form of IL-6 receptor (sIL-6R) acts as an agonist of IL-6 activity. In the IL-6R/CD126/IL6R system, both a membrane-bound IL-6R and a sIL-6R protein are able to mediate IL-6 signals into the cells through the interaction of gp130. It is implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer. Recombinant human IL-6R alpha, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

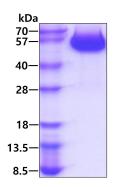
<ADP>LAPRRCP AQEVARGVLT SLPGDSVTLT CPGVEPEDNA TVHWVLRKPA AGSHPSRWAGMGRRLLLRSV QLHDSGNYSC YRAGRPAGTV HLLVDVPPEE PQLSCFRKSP LSNVVCEWGPRSTPSLTTKA VLLVRKFQNS PAEDFQEPCQ YSQESQKFSC QLAVPEGDSS FYIVSMCVASSVGSKFSKTQ TFQGCGILQP DPPANITVTA VARNPRWLSV TWQDPHSWNS SFYRLRFELRYRAERSKTFT TWMVKDLQHH CVIHDAWSGL RHVVQLRAQE EFGQGEWSEW SPEAMGTPWTESRSPPAENE VSTPMQALTT NKDDDNILFR DSANATSLPV QDSSSVPLP<H HHHHH>

### **General References**

Sugita T., et al. (1990) J Exp Med. 171:2001-2009. Yamasaki K., et al. (1988) Science. 241:825-828.

# DATA

#### SDS-PAGE

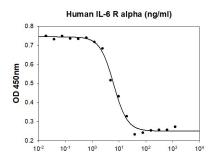


**Biological Activity** 

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.



NKMAXBiO we support you, we believe in your research Recombinant human IL-6R alpha/IL6R protein Catalog Number: ATGP3919



Human IL-6 R alpha inhibits Human IL-6 induced cell proliferation in the M1 mouse myeloid leukemia cells. The ED50 range  $\leq$ 20 ng/ml.