# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 22-235aa

**UniProt No.** Q13651

NCBI Accession No. NP\_001549

### **Alternative Names**

Interleukin 10 receptor subunit alpha, IL-10 receptor subunit alpha, IL-10R subunit alpha, IL-10RA, CD210, CDw210a, Interleukin-10 receptor subunit 1, IL-10R subunit 1, IL-10R1, HIL-10R

# **PRODUCT SPECIFICATION**

### **Molecular Weight**

25.2 kDa (220aa)

### Concentration

0.2mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% 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 MC/9 mouse mast cells. The ED50 for this effect is  $\leq$  300ng/ml with Human IL-10.

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-10 R alpha, also known as Interleukin-10 receptor subunit alpha, is structurally related to interferon receptors. It has been shown to mediate the immunosuppressive signal of interleukin 10, and thus inhibits the synthesis of proinflammatory cytokines. This receptor is reported to promote survival of progenitor myeloid cells through the insulin receptor substrate-2/PI 3-kinase/AKT pathway. Activation of this receptor leads to tyrosine phosphorylation of JAK1 and TYK2 kinases. It has been shown to interact with Interleukin 10 and Janus kinase 1. Recombinant human IL-10 R alpha, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

HGTELPSPPS VWFEAEFFHH ILHWTPIPNQ SESTCYEVAL LRYGIESWNS ISNCSQTLSYDLTAVTLDLY HSNGYRARVR AVDGSRHSNW TVTNTRFSVD EVTLTVGSVN LEIHNGFILGKIQLPRPKMA PANDTYESIF SHFREYEIAI RKVPGNFTFT HKKVKHENFS CVQVKPSVAS RSNKGMWSKEECISLTRQYF TVTN<HHHHHH>

### **General References**

Josephson K, et al. (2001) Acta Crystallogr D Biol Crystallogr. 57(Pt 12):1908-11. Usacheva A, etal. (2002) J Immunol. 169(3):1302-8.

## DATA

### SDS-PAGE



**Biological Activity** 

3ug by SDS-PAGE under reducing conditionandvisualized by coomassie blue stain.

NKMAXBio we support you, we believe in your research Recombinant human IL-10R alpha/IL10RA protein Catalog Number: ATGP3910



Human IL-10 R alpha inhibits Human IL-10 induced cell proliferation in the MC/9 mouse mast cells. The ED50 range is  $\leq$  300 ng/ml.

