

### **CD125**

Catalog # PVGS1377

## **Specification**

#### **CD125 - Product Information**

Primary Accession
Species
Human

Q01344

# **Sequence**

DLLPDEKISL LPPVNFTIKV TGLAQVLLQW KPNPDQEQRN VNLEYQVKIN APKEDDYETR ITESKCVTIL HKGFSASVRT ILQNDHSLLA SSWASAELHA PPGSPGTSIV NLTCTTNTTE DNYSRLRSYQ VSLHCTWLVG TDAPEDTQYF LYYRYGSWTE ECQEYSKDTL GRNIACWFPR TFILSKGRDW LAVLVNGSSK HSAIRPFDQL FALHAIDQIN PPLNVTAEIE GTRLSIQWEK PVSAFPIHCF DYEVKIHNTR NGYLQIEKLM TNAFISIIDD LSKYDVQVRA AVSSMCREAG LWSEWSQPIY VGNDE

### **Purity**

> 95% as analyzed by SDS-PAGE and HPLC.

### **Endotoxin Level**

< 0.2 EU/ μg, determined by LAL method.

Formulation

Lyophilized after extensive dialysis against PBS.

### Reconstitution

Reconstituted in ddH<sub>2</sub>0 or PBS at 100 µg/ml.

### **CD125 - Additional Information**

**Gene ID** 3568

## **Other Names**

Interleukin-5 receptor subunit alpha, IL-5 receptor subunit alpha, IL-5R subunit alpha, IL-5R-alpha, IL-5RA, CDw125, CD125, IL5RA, IL5R

## **Target Background**

<b>Interleukin-5 Receptor Alpha (IL-5RA),</b> also known as CD125, belongs to the Type 5 subfamily in the type I cytokine receptor family. It is composed of a ligand-specific alpha subunit and a signal-transducing beta subunit shared by the receptors for IL-3 and GM-CSF. IL-5RA is mainly expressed on eosinophils and basophils, and plays important roles in the immunobiology of these cell types. It is reported that when stimulated by IL-5, eosinophils down-regulate surface IL-5RA expression to attenuate their IL-5 responsiveness. Elevated IL-5 production may induce immune cell infiltration which leads to allergic inflammation. IL-5RA has also been reported to promote the differentiation of basophils and B cells.

# **CD125 - Protein Information**



### Name IL5RA

## Synonyms IL5R

### **Function**

Cell surface receptor that plays an important role in the survival, differentiation, and chemotaxis of eosinophils (PubMed:<a href="http://www.uniprot.org/citations/9378992" https://www.uniprot.org/citations/9378992"

target="\_blank">9378992</a>). Acts by forming a heterodimeric receptor with CSF2RB subunit and subsequently binding to interleukin-5 (PubMed:<a

href="http://www.uniprot.org/citations/1495999" target="\_blank">1495999</a>, PubMed:<a href="http://www.uniprot.org/citations/22528658" target="\_blank">22528658</a>). In unstimulated conditions, interacts constitutively with JAK2. Heterodimeric receptor activation leads to JAK2 stimulation and subsequent activation of the JAK-STAT pathway (PubMed:<a href="http://www.uniprot.org/citations/9516124" target="\_blank">9516124</a>).

### **Cellular Location**

Membrane; Single-pass type I membrane protein.

### **Tissue Location**

Expressed on eosinophils and basophils.

### CD125 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CD125 - Images