

#### IL-2 Rα

Catalog # PVGS1509

## **Specification**

#### IL-2 Rα - Product Information

Primary Accession Species Human P01589

**Sequence** 

Glu22-Cys213

**Purity** 

> 95% as analyzed by SDS-PAGE<br/>br>> 95% as analyzed by HPLC

**Endotoxin Level** 

< 0.2 EU/  $\mu g$  of protein by gel clotting method

**Biological Activity** 

Determined by its ability to increase the proliferation effect of IL-2 in murine CTLL-2 cells. In the presence of 1.0 ng/ml of recombinant IL-2, ED<sub>50</sub> for this effect is  $< 1.5 \mu g/ml$ .

**Expression System** 

**HEK 293** 

Formulation

Lyophilized after extensive dialysis against PBS.

#### Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 µg/ml.

#### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## IL-2 Rα - Additional Information

**Gene ID 3559** 

### **Other Names**

Interleukin-2 receptor subunit alpha, IL-2 receptor subunit alpha, IL-2-RA, IL-2R subunit alpha, IL2-RA, TAC antigen, p55, CD25, IL2RA

### **Target Background**

Interleukin-2 receptor (IL-2R) is a heterotrimeric protein expressed on the surface of certain immune cells, such as lymphocytes, that binds and responds to the cytokine IL-2. The IL-2R is made up of 3 subunits - alpha ( $\alpha$ ), beta ( $\beta$ ) and gamma ( $\gamma$ ). The  $\alpha$  and  $\beta$  chains are involved in



Tel: 858.875.1900 Fax: 858.875.1999

binding IL-2, while signal transduction following cytokine interaction is carried out by the y-chain, along with the  $\beta$  subunit. The  $\beta$  and  $\gamma$  chains of the IL-2R are members of the type I cytokine receptor family. IL-2R has a high binding affinity to IL-2 and is expressed by antigen-activated T lymphocytes (T cells). IL-2 Rα is also known as CD25, p55, and Tac (activated T cell) antigen.

#### IL-2 Rα - Protein Information

## Name IL2RA

## **Function**

Receptor for interleukin-2. The receptor is involved in the regulation of immune tolerance by controlling regulatory T cells (TREGs) activity. TREGs suppress the activation and expansion of autoreactive T-cells.

### **Cellular Location**

Membrane; Single-pass type I membrane protein.

## IL-2 Rα - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# IL-2 Rα - Images