

**CD25/IL-2R $\alpha$**   
**Catalog # PVGS1536****Specification**

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**CD25/IL-2R $\alpha$  - Product Information**

Primary Accession [P01589](#)  
**Species**  
Human

**Sequence**  
Glu22-Cys213

**Purity**  
> 95% as analyzed by SDS-PAGE

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

**Biological Activity**  
Immobilized Human IL-2 at 5.0  $\mu$ g/ml (100  $\mu$ l/well) can bind CD25/IL-2R $\alpha$ , hFc, Human.

**Expression System**  
HEK 293

Formulation **Lyophilized from a 0.2  $\mu$ m filtered solution in 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  $\mu$ g/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.

**CD25/IL-2R $\alpha$  - 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**  
The IL-2 receptor system consists of three non-covalently linked subunits termed IL-2R $\alpha$ , IL-2R $\beta$ , and IL-2R $\gamma$ . The IL-2R $\alpha$  is a type I transmembrane protein consisting of a 219 amino acid (a.a.) extracellular domain, a 19 a.a. transmembrane domain and a 13 a.a. intracellular domain, which is not involved in the transduction of IL-2 signal. Activated T cells, regulatory T cells (Tregs) and NK

cells express high levels of CD25 and expression of the high-affinity IL-2R $\alpha$  is mostly limited to these cell populations. Signaling via IL-2R $\alpha$  mediates multiple biological processes in various cell populations, e.g. proliferation and differentiation of B cells and NK cells. A soluble form of IL-2R $\alpha$  (IL-2R $\alpha$ ) appears in serum, concomitant with its increased expression on cells. The function of the soluble IL-2R $\alpha$  is unclear. Increased levels of IL-2R $\alpha$  in biological fluids reportedly correlate with increased T and B cell activation and immune system activation. Increased serum concentration of IL-2R $\alpha$  has been observed in patients with a variety of inflammatory conditions and in the course of some leukemias and lymphomas.

## **CD25/IL-2R $\alpha$ - 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.

## **CD25/IL-2R $\alpha$ - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **CD25/IL-2R $\alpha$ - Images**