

# CD25/IL-2R $\alpha$

Catalog # PVGS1536

## Product Information

---

<b>Primary Accession Species</b>	<a href="#">P01589</a> Human
<b>Sequence</b>	Glu22-Cys213
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	
<b>Biological Activity</b>	Immobilized Human IL-2 at 5.0 $\mu$ g/ml (100 $\mu$ l/well) can bind CD25/IL-2R $\alpha$ , hFc, Human.
<b>Expression System</b>	HEK 293
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS.
<b>Reconstitution</b>	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.
<b>Storage &amp; Stability</b>	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.

## Additional Information

---

<b>Gene ID</b>	3559
<b>Other Names</b>	Interleukin-2 receptor subunit alpha, IL-2 receptor subunit alpha, IL-2-RA, IL-2R subunit alpha, IL2-RA, TAC antigen, p55, CD25, IL2RA
<b>Target Background</b>	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.

## Protein Information

---

<b>Name</b>	IL2RA
<b>Function</b>	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.
<b>Cellular Location</b>	Membrane; Single-pass type I membrane protein.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.