

Rev04 DATASHEET

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CD25/IL-2Rα Fc Chimera, Human

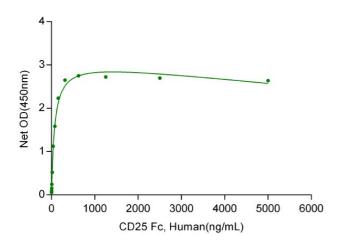
Cat. No.: Z03400

Product Introduction

Species	Human
Protein Construction	CD25/IL-2Pg (Glu22-Cvs213)
	CD25/IL-2Rα (Glu22-Cys213) Accession # P01589 hFc
	N-term C-term
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	Immobilized Human IL-2 at 5.0 μg/ml (100 μl/well) can bind CD25/IL-2Rα, hFc, Human.
Expression System	HEK 293
Apparent Molecular Weight	65~75 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm 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 ₂ 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.

Examples





Immobilized IL-2,Human (Cat.No.Z03074) at $5\mu g/mL$ (100 $\mu L/well$) can bind CD25/IL-2R α , Fc Chimera,Human with a linear range of 1.2-11 ng/mL.

Background

Target Background: The IL-2 receptor system consists of three non-covalently linked subunits termed IL-2Rα, IL-2Rβ, and IL-2Rγ. The IL-2Rα 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-2Rα is mostly limited to these cell populations. Signaling via IL-2Rα mediates multiple biological processes in various cell populations, e.g. proliferation and differentiation of B cells and NK cells. A soluble form of IL-2Rα (IL-2Rα) appears in serum, concomitant with its increased expression on cells. The function of the soluble IL-2Rα is unclear. Increased levels of IL-2Rα in biological fluids reportedly correlate with increased T and B cell activation and immune system activation. Increased serum concentration of IL-2Rα has been observed in patients with a variety of inflammatory conditions and in the course of some leukemias and lymphomas.

Synonyms: CD25 antigen; CD25; IDDM10; IL-2 R alpha; IL-2Ra

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.