

Rev07
 Update: Aug,20,2025

DATASHEET

CD25/IL-2R α Fc Chimera, Human

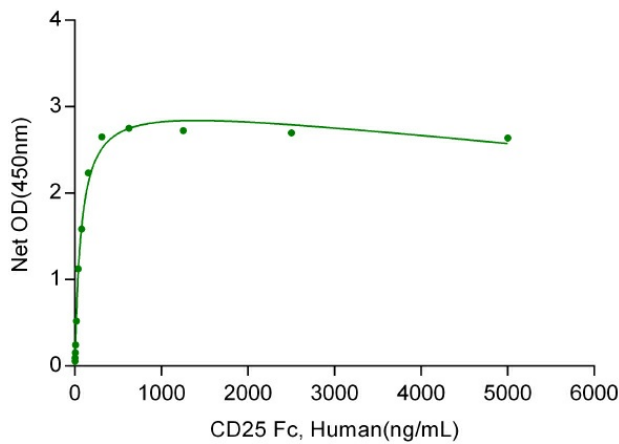
Cat. No.: Z03400

Product Introduction

Species	Human
Protein Construction	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;"> CD25/IL-2Rα (Glu22-Cys213) Accession # P01589 <small>N-term</small> </div> <div style="background-color: #76b82a; color: white; padding: 5px; text-align: center;"> hFc <small>C-term</small> </div> </div>
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/ μ g of protein by gel clotting method
Biological Activity	Immobilized Human IL-2 at 5.0 μ g/ml (100 μ l/well) can bind CD25/IL-2R α , hFc, Human.
Expression System	HEK 293
Apparent Molecular Weight	65~75 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μ 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 ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for 6 months at lower than -70°C. Upon reconstitution, the product should be stable for 1 week at 4°C or for 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 μ g/mL (100 μ 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-2R α , IL-2R β , and IL-2R γ . The IL-2R α 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 α is mostly limited to these cell populations. Signaling via IL-2R α 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 α (IL-2R α) appears in serum, concomitant with its increased expression on cells. The function of the soluble IL-2R α is unclear. Increased levels of IL-2R α in biological fluids reportedly correlate with increased T and B cell activation and immune system activation. Increased serum concentration of IL-2R α 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-2R α

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

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