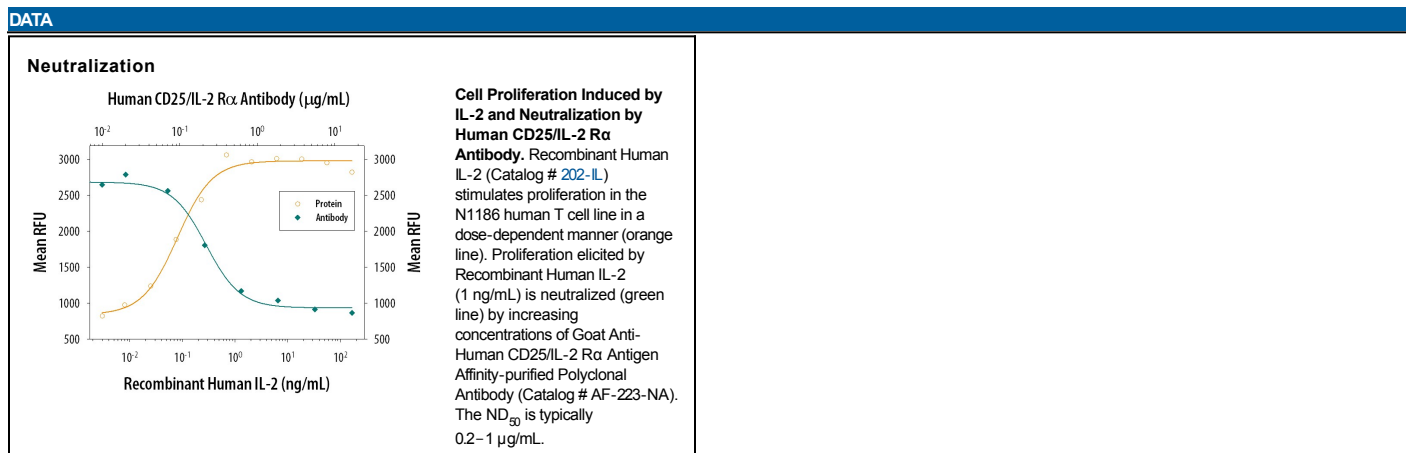


| DESCRIPTION | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human CD25/IL-2 R α in direct ELISAs and Western blots. In direct ELISAs, less than 15% cross-reactivity with recombinant human (rh) IL-2 sR γ is observed, less than 5% cross-reactivity with rhIL-6 sR is observed, and less than 1% cross-reactivity with rhIL-1 sRII and rhIL-2 sR β is observed. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse IL-2 R α is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human CD25/IL-2 R α Glu22-Cys213 Accession # P01589 |
| Endotoxin Level | <0.10 EU per 1 μ g of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS. |

| APPLICATIONS | | |
|--|---|---|
| Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website. | | |
| | Recommended Concentration | Sample |
| Western Blot | 0.1 μ g/mL | Recombinant Human CD25/IL-2 R α (Catalog # 223-2A) |
| Flow Cytometry | 2.5 μ g/10 ⁶ cells | Human whole blood lymphocytes |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |
| Neutralization | Measured by its ability to neutralize IL-2-induced proliferation in the N1186 human T cell line. The Neutralization Dose (ND ₅₀) is typically 0.2-1 μ g/mL in the presence of 1 ng/mL Recombinant Human IL-2. | |



| PREPARATION AND STORAGE | |
|--------------------------------|---|
| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Human CD25, also known as IL-2 receptor alpha (IL-2 R α) and as Tac antigen, was initially identified as a 55 kDa membrane glycoprotein that is capable of binding IL-2. The IL-2 R α cDNA encodes a 272 amino acid residue precursor Type I membrane protein with a 21 residue signal peptide, a 219 residue extracellular region, a 19 residue transmembrane region and a 13 residue cytoplasmic domain. IL-2 R α lacks structural features characteristic of members of the cytokine receptor superfamily. By itself, IL-2 R α binds IL-2 with low affinity. However, when IL-2 R α is associated with the IL-2 receptor beta and gamma chains, a high affinity heterotrimeric receptor complex that transduces IL-2 signals is formed. Soluble forms of many cytokine receptors have been reported, and a soluble form of IL-2 R α (IL-2 sR α) appears in serum, concomitant with its increased expression on cells. The function of the soluble IL-2 R α is unclear. Increased levels of IL-2 sR α in biological fluids reportedly correlate with increased T and B cell activation and immune system activation. Increased serum concentration of IL-2 sR α has been observed in patients with a variety of inflammatory conditions and in the course of some leukemias and lymphomas.