

## DESCRIPTION

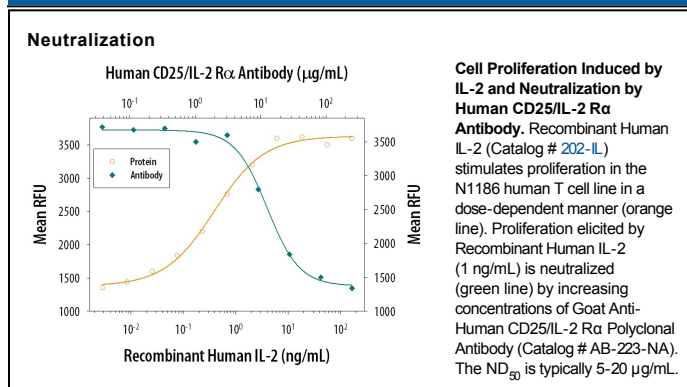
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD25/IL-2 R $\alpha$ in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) IL-2 R $\beta$ , rhIL-2 R $\gamma$ , and rhIL-15 R is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Protein A or G purified
<b>Immunogen</b>	recombinant human CD25/IL-2 R $\alpha$ extracellular domain
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 $\mu$ g/mL	Recombinant Human CD25/IL-2 R $\alpha$ (Catalog # 223-2A)
<b>Neutralization</b>		Measured by its ability to neutralize IL-2-induced proliferation in the N1186 human T cell line. The Neutralization Dose (ND <sub>50</sub> ) is typically 5-20 $\mu$ g/mL in the presence of 1 ng/mL Recombinant Human IL-2.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 1 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Human CD25, also known as IL-2 receptor alpha (IL-2 R $\alpha$ ) and as Tac antigen, was initially identified as a 55 kDa membrane glycoprotein that is capable of binding IL-2. The IL-2 R $\alpha$  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 $\alpha$  lacks structural features characteristic of members of the cytokine receptor superfamily. By itself, IL-2 R $\alpha$  binds IL-2 with low affinity. However, when IL-2 R $\alpha$  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 $\alpha$  (IL-2 sR $\alpha$ ) appears in serum, concomitant with its increased expression on cells. The function of the soluble IL-2 R $\alpha$  is unclear. Increased levels of IL-2 sR $\alpha$  in biological fluids reportedly correlate with increased T and B cell activation and immune system activation. Increased serum concentration of IL-2 sR $\alpha$  has been observed in patients with a variety of inflammatory conditions and in the course of some leukemias and lymphomas.