



# Anti-Human sIL-2 Receptor alpha

20171219BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>102-P47</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** Produced from sera of rabbits pre-immunized with highly pure recombinant human sIL-2 R alpha. Anti-human sIL-2 R alpha-specific antibody was purified by affinity chromatography employing an immobilized sIL-2 R alpha matrix.

## Target Background

<b>Synonyms (Target):</b>	soluble IL-2 receptor, TAC-antigen, CD25 antigen, IL2RA; CD25; IL2R; TCGFR; IDDM10
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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 extracellular domain, a 19 amino acid transmembrane domain and a 13 amino acid intracellular domain, which is not involved in the transduction of IL-2 signals. Proteolytic processing of IL-2R alpha releases the entire extracellular domain of IL-2R alpha thereby generating a 219 amino acid soluble protein called soluble IL-2R alpha (sIL-2R alpha). The homodimeric form binds IL-2 (KD=10mM) and facilitates IL-2 signaling. The secreted sIL-2R alpha is expressed on leukemia cells, lymphoma cells, newly activated T and B cells, as well as on approximately 10% of NK cells. Recombinant human sIL-2R alpha is a 24.8 kDa protein containing 219 amino acid residues consisting of only the extracellular domain of IL-2R alpha. Due to glycosylation, IL-2R alpha has an approximate molecular weight of 31 kDa based on SDS-PAGE gel and Mass Spectrometry.

### Database References Target

<b>Protein RefSeq:</b>	NP_000408.1
<b>Uniprot ID:</b>	P01589
<b>mRNA RefSeq:</b>	NM_000417.2

## Product Specifications

<b>Species reactivity</b>	Human
<b>Clone/Ab feature</b>	Rabbit IgG
<b>Cross reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal Antibody
<b>Purification</b>	Antigen-affinity purified
<b>Immunogen</b>	highly pure recombinant sIL-2 R alpha
<b>Formulation</b>	lyophilized from PBS
<b>Reconstitution buffer</b>	water

**Reconstitution:** Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

**Stability:** The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

### Applications

**Western Blot:** To detect Human sIL-2 Receptor alpha by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 µg/ml. When used in conjunction with compatible secondary reagents the detection limit for Recombinant human sIL-2 Receptor alpha is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

**ELISA:** To detect Human sIL-2 Receptor alpha by sandwich ELISA (using 100µl/well) a concentration of 0.5-2.0 µg/ml of this antibody is required. Used in conjunction with compatible secondary reagents as detection antibody allows the detection of at least 2 – 4 ng/ml recombinant human sIL-2 Receptor alpha.

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**