



## Anti-Human IL-2 receptor, soluble

20150304ML



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

<b>Cat.-no.:</b>	<b>101-M165</b>
Size:	500 µg
Lot. No.:	According to product label

**Preparation:** Produced in mice using highly pure (>98%) recombinant human soluble IL-2 Receptor alpha as the immunizing antigen. This IgG2aK antibody was purified from cell culture by Protein G affinity chromatography.

### Target Background

<b>Synonyms (Target):</b>	IL-2 receptor, soluble
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Human IL-2 exerts its biological effects via signaling through its receptor system, IL-2R. IL-2 and its receptor (IL-2R) are required for T-cell proliferation and other fundamental functions which are crucial of the immune response. IL-2R consists of 3 noncovalently linked type I transmembrane proteins which are the alpha (p55), beta (p75), and gamma (p65) chains. The IL-2R alpha chain contains an extracellular domain of 219 amino acids, a transmembrane domain of 19 amino acids, and an intracellular domain of 13 amino acids. The secreted extracellular domain of IL-2R alpha (s-IL-2R-a), also called TAC-antigen, is expressed on leukemia cells, lymphoma cells, approximately 10% NK cells, as well as recently activated T and B cells. Recombinant human s-IL-2R-a 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>Cross reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal Antibody
<b>Purification</b>	Protein G chromatography
<b>Immunogen</b>	Recombinant Human sIL-2 Receptor $\alpha$
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	water

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

**Stability:** Lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least 2 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

**Immunohistochemistry:** This antibody stained frozen human tonsil. The recommended concentration is 5.0 µg/ml at room temperature. A labeled polymer detection system was used with DAB chromogen.

**ELISA:** In a sandwich ELISA (assuming 100µl/well), a concentration of 4.0-8.0 µg/ml of this antibody will detect at least 100 pg/ml of recombinant human sIL-2R $\alpha$  when used in conjunction with compatible secondary reagents.

**Western blotting:** To detect human sIL-2R $\alpha$  by Western Blot analysis this antibody can be used at a concentration of 0.20-0.40 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant human sIL-2R $\alpha$  is 2.0-4.0 ng/lane, under reducing or non-reducing conditions.

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