

IL-2 Receptor α , Human Recombinant

CATALOG #:	7100-10	10 μ g
	7100-50	50 μ g
ALTERNATE NAMES:	soluble IL-2 receptor, TAC-antigen, CD25 antigen	
SOURCE:	(BTI-Tn-5B1-4) Hi-5 Insect Cells	
PURITY:	\geq 98% by SDS-PAGE gel and HPLC analyses	
MOL. WEIGHT:	24.8 kDa (31 kDa on SDSPAGE due to glycosylation)	
ENDOTOXIN LEVEL:	< 0.1 ng/ μ g of protein (<1EU/ μ g).	
FORM:	Lyophilized	
FORMULATION:	Sterile filtered through a 0.2 micron filter. Lyophilized from 1x PBS	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in 1x PBS pH 7.2 to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:

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 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 α releases the entire extracellular domain of IL-2R α thereby generating a 219 amino acid soluble protein called soluble IL-2R α (sIL-2R α). The homodimeric form binds IL-2 (KD=10mM) and facilitates IL-2 signaling. The secreted sIL-2R α 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 α is a 24.8 kDa protein containing 219 amino acid residues consisting of only the extracellular domain of IL-2R α . Due to glycosylation, IL-2R α has an approximate molecular weight of 31 kDa based on SDSPAGE gel and Mass Spectrometry.

BIOLOGICAL ACTIVITY:

Determined by its ability to increase the proliferation effect of IL-2 in mouse CTLL-2 cells. In the presence of 1 ng/ml of recombinant IL-2, the expected ED₅₀ for this effect is between 0.5-1.5 μ g/ml.

AMINO ACID SEQUENCE:

ELCDDDPPEI PHATFKAMAY KEGTMLNCEC KRGFRRIKSG SLYMLCTGNS
SHSSWDNQCC CTSSATRNTT KQVTPQPEEQ KERKTTMQS PMQPVDQASL
PGHCREPPPW ENEATERIYH FVVGQMVYYQ CVQGYRALHR GPAESVCKMT
HGKTRWTQPQ LICTGEMETS QFPGEEKPQA SPEGRPESET SCLVTTTDFQ
IQTEMAATME TSIFTTYEQ

RELATED PRODUCTS:

- Human Cell^{exp} Human Recombinant IL-2 (Cat # 6461-10, -50)
- IL-2, human recombinant (Cat # 4131-10, -50, -1000)
- IL-2, murine recombinant (Cat # 4132-20, -100, -1000)
- IL-2, rat recombinant (Cat # 4133-20, -100, -1000)
- IL-2 Antibody (Cat # 5133-100)
- IL-2 Antibody (Cat # 5131-100)

FOR RESEARCH USE ONLY! Not to be used in humans.