sIL-2Ralpha Human (BTI-Tn-5B1-4) Hi-5 Insect cells*

Product Data Sheet

Type: Recombinant
Source: (BTI-Tn-5B1-4) Hi-5 Insect cells*
Species: Human
Other names: soluble IL-2 receptor, TAC-antigen, CD25 antigen

Cat. No.:

RBG10002SRA005	(5 µg)
RBG10002SRA025	(25 µg)
RBG10002SRA100	(100 µg)

Description

The IL-2 receptor system consists of three non-covalently linked subunits termed IL-2Ralpha, IL-2Rbeta, and IL-2R?. The IL-2Ralpha 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-2Ralpha releases the entire extracellular domain of IL-2Ralpha, thereby generating a 219 amino acid soluble protein called soluble IL-2Ralpha (sIL-2Ralpha). The homodimeric form binds IL-2 (KD=10mM) and facilitates IL-2 signaling. The secreted sIL-2Ralpha is expressed on leukemia cells, lymphoma cells, and newly activated T and B cells, as well as on approximately 10% of NK cells. Recombinant Human sIL-2Ralpha is a 24.8 kDa protein containing 219 amino acid residues consisting of only the extracellular domain of IL-2Ralpha. Due to glycosylation, IL-2Ralpha has an approximate molecular weight of 31 kDa based on SDS-PAGE gel and Mass Spectrometry.

Research topic

Immune Response, Infection and Inflammation, Neural tissue markers, Transplantation

Amino Acid Sequence

```
ELCDDDPPEI PHATFKAMAY KEGTMLNCEC KRGFRRIKSG SLYMLCTGNS SHSSWDNQCQ CTSSATRNTT KQVTPQPEEQ
KERKTTEMQS PMQPVDQASL PGHCREPPPW ENEATERIYH FVVGQMVYYQ CVQGYRALHR GPAESVCKMT HGKTRWTQPQ
LICTGEMETS QFPGEEKPQA SPEGRPESET SCLVTTTDFQ IQTEMAATME TSIFTTEYQ
```

Source

(BTI-Tn-5B1-4) Hi-5 Insect cells*

Purity

98%

Biological Activity

Determined by its ability to increase the proliferation effect of IL-2 in murine CTLL-2 cells. In the presence of 1 ng/ml of recombinant IL-2, the expected ED_{50} for this effect is between 0.5-1.5 µg/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in 1× 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.

Storage, Stability/Shelf Life

-20°C

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com