

#### Recombinant Human sIL-2Ra

Catalog # PBG10413

# **Specification**

#### Recombinant Human sIL-2Rg - Product Information

#### Recombinant Human sIL-2Rα - Additional Information

## **Description**

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=10nM) 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.\*<em> Manufactured using (BTI-Tn-5B1-4) cells under license from the Boyce Thompson Institute for Plant Research, Inc.</em>

# **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 <strong>ED</strong><sub>>50</sub> for this effect is between 0.5 - 1.5  $\mu$ g/ml.

### Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

## **Endotoxin**

Endotoxin level is  $<0.1 \text{ ng}/\mu\text{g}$  of protein ( $<1\text{EU}/\mu\text{g}$ ).

## **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

# **Storage**

-20°C

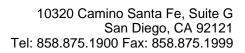
### **Precautions**

Recombinant Human sIL- $2R\alpha$  is for research use only and not for use in diagnostic or therapeutic procedures.

### Recombinant Human sIL-2Rα - Protocols

Provided below are standard protocols that you may find useful for product applications.

Western Blot





- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human sIL-2R $\alpha$  - Images