

DATASHEET

Version 20181206

IL-2 R α , His, Human

Cat. No.: Z03297-50

Size: 50.0 ug

Synonyms: soluble IL-2 receptor, TAC-antigen, CD25 antigen

Description:

Interleukin-2 receptor (IL-2R) is a heterotrimeric protein expressed on the surface of certain immune cells, such as lymphocytes, that binds and responds to the cytokine IL-2. The IL-2R is made up of 3 subunits - alpha (α), beta (β) and gamma (γ). The α and β chains are involved in binding IL-2, while signal transduction following cytokine interaction is carried out by the γ -chain, along with the β subunit. The β and γ chains of the IL-2R are members of the type I cytokine receptor family. IL-2R has a high binding affinity to IL-2 and is expressed by antigen-activated T lymphocytes (T cells). IL-2 R α is also known as CD25, p55, and Tac (activated T cell) antigen. Recombinant Human Interleukin-2 Receptor α (IL-2 R α), His produced in HEK 293 cells is a polypeptide chain containing 205 amino acids. A fully biologically active molecule, rhIL-2 R α has a molecular mass of 42 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

```
00001 HHHHHHHHEL CDDDPPEIPH ATFKAMAYKE GTMLNCECKR
00041 GFRRIKSGSL YMLCTGNSSH SSWDNQCQCT SSATRNNTTKQ
00081 VTPQPEEQKE RKTTEMQSPM QPVDQASLPG HCREPPPWEN
00121 EATERIYHFV VGMVYVYQCV QGYRALHRGP AESVCKMTHG
00161 KTRWTQPQLI CTGEMETSQF PGEKPKQASP EGRPESETSC
00201
```

Source: HEK 293

Species: Human

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, ED₅₀ for this effect is < 1.5 μ g/ml.

Molecular Weight: 42 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/ μ g, determined by LAL method.

Storage: Lyophilized recombinant Human Interleukin-2 Receptor α remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human Interleukin-2 Receptor α should be stable up to 1 week at 4°C or up to 3 months at -20°C.