

Product Information

INTERLEUKIN-5 SOLUBLE RECEPTOR- α Human, Recombinant Expressed in *Sf*21 insect cells

Product No. I 5646

Description

In humans, eosinophils and basophils are the major cell types known to be responsive to interleukin 5 (IL-5).¹ Two components have been identified to form part of the IL-5 receptor: a ligand-binding 60 kDa α chain and a 130 kDa β chain that increases the binding affinity though cannot bind IL-5 by itself.² The recombinant human IL-5 soluble receptor- α is produced by a DNA sequence encoding the N-terminal 335 amino acid residues of human IL-5 soluble-receptor α .³ The 315 amino acid residue of recombinant human IL-5 soluble receptor- α was generated by the removal of a 20 amino acid residue signal peptide. The human IL-5 soluble receptor- α has antagonistic properties as it interferes with the binding of IL-5 and inhibits the proliferation of IL-5 dependent cell lines.¹ It also inhibits the IL-5 differentiation of eosinophils from umbilical cord blood cultures.³

Performance Characteristics

The biological activity of recombinant, human IL-5 soluble receptor- α is measured by its ability to inhibit the IL-5 dependent proliferation of TF-1 cells.⁴ The EC_{50} is defined as the effective concentration of soluble receptor that elicits a 50% inhibition of IL-5 activity in a cell based bioassay.

Product Information

Expressed in *Sf* 21 insect cells
Molecular Weight: 43 kDa
Purity: \geq 97% as determined by SDS-PAGE
 EC_{50} : 100 - 400 ng/ml
Package Size: 25 μ g/vial
Formulation: Lyophilized from a 0.2 μ m-filtered solution of phosphate buffered saline, pH 7.4.
Carrier Protein: 1.25 mg bovine serum albumin (BSA)
Sterility: 0.2 μ m filtered, aseptic fill
Endotoxin: \leq 0.1 ng/ μ g IL-5 soluble receptor- α

Reconstitution and Use

Reconstitute the contents of the vial using 0.2 μ m-filtered PBS containing 0.1% HSA or BSA to a concentration of not less than 50 μ g/ml.

Storage

Prior to reconstitution, store at -20 °C for no more than 6 months. After reconstitution, this cytokine may be stored at $2-8$ °C for a maximum of one month. For extended storage, freeze in working aliquots at -70 °C or -20 °C for no more than three months. Repeated freezing and thawing is not recommended.

References

1. Tavernier, J., et al., Proc. Natl. Acad. Sci. USA, **89**, 7041 (1992).
2. Devos, R., et al., EMBO J., **8**, 2133, (1991).
3. Tavernier, J., et al., Cell, **66**, 1175 (1991).
4. Kitamura, T., et al., Cell, **66**, 1165 (1991).

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