IL-4Rα/CD124 (C-Fc), Human, Recombinant

Cat. No. : PCK200

General Information

Synonyms	Interleukin-4 Receptor subunit alpha;IL-4 Receptor subunit alpha;IL-4R subunit alpha;IL-4 R-alpha;IL-4RA;CD124;IL-4-binding Protein;IL4-BP;IL4R;IL4RA
Species	Human
Expression host	Human Cells
Sequence	Met26-Gln231
Accession	P24394
Tag	C-Fc
Mol mass	50.2 kDa
Expiration date	12 months
Bio activity	Measured by its ability to inhibit IL-4-dependent proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is 5-20 ng/mL.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Interleukin 4 Receptor alpha (IL4-Ra) is a widely expressed 140 kDa transmembrane glyco Protein in the class I Cytokine Receptor family. Mature human IL4-Ra consists of a 207 amino acid (aa) extracellular domain (ECD) that contains a Cytokine binding region and one fibronectin type III domain, a 24 aa transmembrane segment, and a 569 aa cytoplasmic domain that contains one Box 1 Motif and one ITIM Motif. IL4-Ra plays an important role in Th2-biased immune responses, alternative macrophage activation, mucosal immunity, allergic inflammation, tumor progression, and atherogenesis. Soluble forms of IL4-Ra, generated by alternate splicing or proteolysis, retain Ligand binding properties and inhibit IL-4 bioactivity. IL4-Ra is a component of two distinct Receptor complexes and shows species selectivity between human and mouse. It can associate with the common gamma chain (γc) to form the IL-4 responsive type I Receptor in which γc increases the affinity for IL-4 and enables signaling. It can alternatively associate with IL13-Ra1 to form the type II Receptor which is responsive to both IL-4 and IL-13. The use of shared Receptor components contributes to the overlapping biological effects of IL-4 and I L-13 as well as other Cytokines that utilize γc.