

Recombinant Human IL4RA/CD124 Protein (His Tag)

Catalog No. PKSH032647

Note: Centrifuge before opening to ensure complete recovery of vial contents.

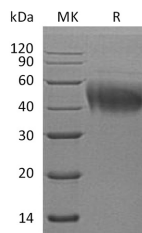
Description

Synonyms	Interleukin-4 receptor subunit alpha;IL-4 receptor subunit alpha;IL-4R subunit alpha;IL-4R-alpha;IL-4RA;CD124;IL-4-binding protein;IL4-BP;IL4R;IL4RA
Species	Human
Expression Host	HEK293 Cells
Sequence	Met26-His232
Accession	P24394
Calculated Molecular Weight	24.4 kDa
Observed molecular weight	35-60 kDa
Tag	C-His
Bioactivity	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.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Interleukin 4 Receptor alpha (IL4-Ra) is a widely expressed 140 kDa transmembrane glycoprotein 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 (γ_c) to form the IL-4 responsive type I receptor in which γ_c 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 IL-13 as well as other cytokines that utilize γ_c .