



Recombinant Protein Technical Manual

Recombinant Human IL4RA/CD124 Protein (Fc Tag)(Active)
RPES2463

Product Data:

Product SKU: RPES2463

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P24394

Protein Information:

Molecular Mass: 50.2 kDa

AP Molecular Mass: 60-70 kDa

Tag: C-Fc

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.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

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

Immunogen Information:

Sequence: Met26-Gln231

Background:

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 IL3. The use of shared receptor components contributes to the overlapping biological effects of IL-4 and IL3 as well as other cytokines that utilize γ c.