



Recombinant Protein Technical Manual

Recombinant Human IL4RA/CD124 Protein (His Tag)(Active)
RPES3538

Product Data:

Product SKU: RPES3538

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000409.1

Protein Information:

Molecular Mass: 25.3 kDa

AP Molecular Mass: 43-48 kDa

Tag: C-His

Bio-activity: 1. Measured by its binding ability in a functional ELISA. Immobilized human IL4R-His at 10 µg/mL (100 µl/well) can bind biotinylated human IL4. The EC50 of biotinylated human IL4 is 20.8-48.5 ng/mL. 2. Measured by its ability to inhibit IL-4 dependent proliferation of TF human erthroleukemic cells. The ED50 for this effect is 4-20 ng/ml in the presence of 2 ng/ml IL-4.

Purity: > 98 % 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 sterile PBS, pH 7.4

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

Application: Functional ELISA

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: Met 1-His 232

Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associate with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD124, also known as interleukin 4 receptor (IL4R), is a type I transmembrane protein that can regulate IgE antibody production in B cells through binding to interleukin 4 and interleukin 13 and promote differentiation of Th2 cells through binding to interleukin 4. The membrane-bound form of CD124 can be hydrolyzed to soluble form which can inhibit IL4-mediated cell proliferation and IL5 upregulation by T-cells.