



Recombinant Protein Technical Manual

Recombinant Cynomolgus Interleukin-4 Receptor Subunit Alpha/IL-4 R α Protein (His Tag)

RPE33353

Product Data:

Product SKU: RPE33353

Size: 10 μ g

Species: Cynomolgus

Expression host: Human Cells

Uniprot: G7Q0S7

Protein Information:

Molecular Mass: 24.6 kDa

AP Molecular Mass: 40 kDa

Tag: C-His

Bio-activity: Immobilized Human IL-4(Cat: PKSH033456) at 10 μ g/ml(100 μ l/well) can bind Human IL-4Ra-His. The ED50 of Human IL-4Ra-His is 7 μ g/mL.

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

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 μ m filtered solution of PBS, pH 7.4.

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

Application: Functional ELISA

Synonyms: Interleukin-4 receptor subunit alpha;IL-4R-alpha;CD124;IL4-BP;Soluble IL-4R-alpha

Immunogen Information:

Sequence: Met26-Arg232

Background:

Interleukin-4 receptor subunit alpha(IL-4RA), also known as Soluble IL-4 receptor subunit alpha, belongs to the type I cytokine receptor family and type 4 subfamily. It is expressed in both Th1 and Th2 cells. It functions as a receptor for both interleukin 4 and interleukin 13 and couples to the JAK1/2/3-STAT6 pathway. The IL4 response is involved in promoting Th2 differentiation. The IL4/IL13 responses are involved in regulating IgE production and chemokine and mucus production at sites of allergic inflammation. In certain cell types, IL-4RA can signal through activation of insulin receptor substrates, IRS1/IRS2. The functional IL4 receptor is formed by initial binding of IL4 to IL4R. Subsequently it recruits to the complex of the common gamma chain. In immune cells, IL-4RA creates a type I receptor. In non-immune cells, it forms a type II receptor with IL13RA1. IL4R can also interact with the IL13/IL13RA1 complex to form a similar type II receptor and interacts with the SH2-containing phosphatases, PTPN6/SHIP1, PTPN11/SHIP2 and INPP5D/SHIP.