

## Recombinant Cynomolgus IL-4 Receptor Subunit Alpha/IL-4RA (C-Fc)

Catalog No. PKSQ050100

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

### Description

<b>Synonyms</b>	Interleukin-4 receptor subunit alpha;IL-4R-alpha;CD124;IL4-BP;Soluble IL-4R-alpha;IL-4RA
<b>Species</b>	Cynomolgus macaques
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met26-Arg232
<b>Accession</b>	G7Q0S7
<b>Calculated Molecular Weight</b>	50.7 kDa
<b>Observed molecular weight</b>	65-90 kDa
<b>Tag</b>	C-Fc
<b>Bioactivity</b>	Measured by its ability to inhibit IL-4-dependent proliferation of TF-1 human erythroleukemic cells. The ED <sub>50</sub> for this effect is 6.02 ng/ml.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM Glycine, pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### 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.

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