

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



Catalog Number: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.<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the pr |
| <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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