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

by Elabscience

Catalog Number:PKSQ050100

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

**Description** 

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

alpha;IL-4RA

**Species** Cynomolgus macaques

Expression Host HEK293 Cells
Sequence Met26-Arg232
Accession G7Q0S7
Calculated Molecular Weight 50.7 kDa
Observed molecular weight 65-90 kDa

Tag C-Fc

**Bioactivity** 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** 

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

**Endotoxin**  $< 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method.}$ 

**Storage** 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  $< -20^{\circ}$ 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 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 pr

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

## **Background**

Interleukin-4 receptor subunit alpha(IL-4RA), alos known as Soluble IL-4 receptor subunit alpha, belongs to the type I cytokine receptor family and type 4 subfamily. It expressed in both Th1 and Th2 cells. It functions as 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 of 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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Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com Email: techsupport@elabscience.com