

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

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 ₅₀ for this effect is 6.02 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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°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 printed manual.
Reconstitution	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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