

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.

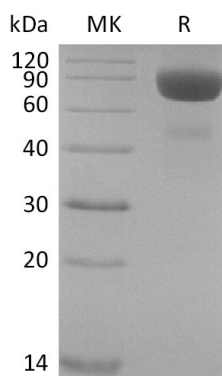
Description

| | |
|----------------------|---|
| Species | Cynomolgus macaques |
| Source | HEK293 Cells-derived Cynomolgus macaques IL-4RA protein Met26-Arg232, with an C-terminal Fc |
| Calculated MW | 50.7 kDa |
| Observed MW | 65-90 kDa |
| Accession | G7Q0S7 |
| Bio-activity | 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

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|-----------------------|---|
| 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. |

Data



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.