Data Sheet (Cat.No.TMPJ-00387)

IL-4R alpha Protein, Mouse, Recombinant (hFc)

General Information

Synonyms:	Soluble IL-4R-alpha;Interleukin-4 receptor subunit alpha;Soluble IL-4R-α;CD124;IL-4R-α;IL-4R-alpha;Interleukin-4 receptor subunit α;IL4-BP
Protein Construction:	Ile26-Arg233
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P16382
Molecular Weight:	65-80 KDa (reducing condition)
AA Sequence:	Ile26-Arg233

QC Testing

Biological Activity:	1. Loaded Mouse IL-4-His on HIS1K Biosensor, can bind Mouse IL-4RA-Fc with an affinity constant of <10⁻³ nM as determined in BLI assay. (Regularly tested) 2. Immobilized Mouse IL-4RA-Fc at 2μg/ml (100 μl/well)can bind Mouse IL-4-His . The ED50 of Mouse IL-4-Hisis 4.32 ng/ml. (Regularly tested)
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481