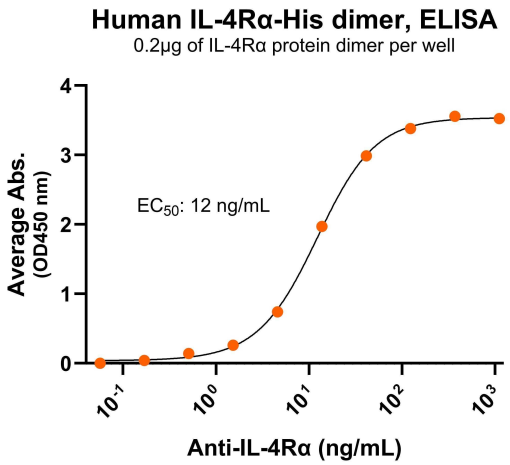
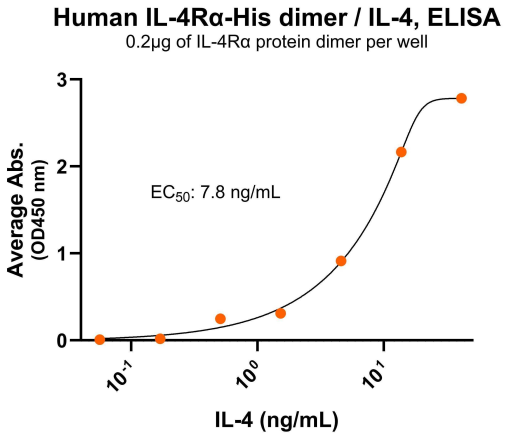
Bioactive, Human IL4Ra Protein Dimer, His Tag
Product Code: CSP-25219-01
For Research Use Only (RUO)

## Bioactivity – Antibody Binding



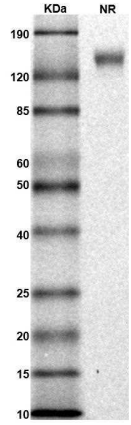

Immobilized human IL-4Rα dimer, His-tag (CSP-25219-01) at 2 μg/mL (100 μL/well) can bind anti-human IL-4Rα monoclonal antibody with half maximal effective concentration (EC50) range of 6-24 ng/mL (QC tested).

## Bioactivity – Ligand Binding




Immobilized human IL-4Rα dimer, His-tag (CSP-25219-01) at 2 μg/mL (100 μL/well) can bind human IL-4 with half maximal effective concentration (EC50) range of 3.9-15.6 ng/mL (QC tested).

## SDS-PAGE




MW: Molecular Weight marker reduced condition
NR: IL-4Rα dimer under non-reduced condition

The migration range of the heterodimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.

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**Expression Host**
HEK293T

**Protein Name**
IL4Ra

**Purity**
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

**Alternate Name(s)**
IL4R, cluster of differentiation 124, CD124, IL-4RA, IL4RA, Interleukin-4 receptor

**Protein Construct**
IL-4Rα dimer protein contains a IL-4Rα extracellular domain (UniProt# P24394) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

**Amino Acid Range**
M26-H232

**SDS-Page Molecular Weight**
64 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing condition is between 120 and 190 kDa on SDS PAGE.

**Formulation**
0.22μm filtered PBS, pH 7.4

**Shipping Conditions**
Frozen Dry Ice

**Stability & Storage**
-80$^{0}$C

## Background

Human interleukin 4 receptor alpha (IL-4Rα) is a Type 1 transmembrane and a Type 1 cytokine receptor. IL-4Rα is also known as cluster of differentiation 124 (CD124). IL-4Rα is a key component in interleukin 4 (IL-4) and IL-13 cytokine signaling involved in immune regulation, particularly in Th2 immune responses, allergy, and asthma. IL-4Rα contains an extracellular domain with an overall L shape organized in two covalently linked domains: an h-type immunoglobulin fold (D1) and a standard fibronectin type III (FN III)–like topology (D2). IL-4Rα can bind IL-4 and IL-13 and allergic inflammation is largely driven by IL-4 and IL-13 signaling through IL-4Rα, making IL-4Rα a promising therapeutic target for allergic diseases.