
Product Name: Human IL1RAP Protein Dimer, His Tag

Product Code: CSP-26325-01

FOR RESEARCH USE ONLY (RUO)

Protein Name: IL1RAP, Protein Dimer

Alternate Name(s): IL1AP, C3orf13, IL-1RAcP, IL1R3

Expression Host
HEK293T

Amino Acid Range
S21 - T367

Protein Construct

IL1RAP dimer protein contains an IL1RAP extracellular domain (UniProt# Q9NPH3) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight

96 kDa. The migration range of the protein dimer with glycosylation under non-reducing condition is 190 kDa on SDS-PAGE.

Purity

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

Shipping Conditions
Frozen Ice Packs

Stability & Storage
-20°C

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as protectant

Reconstitution of lyophilized product

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:

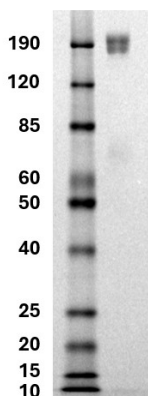
Reconstitute with 50 µL sterile deionized water.

For 100µg product size:

Reconstitute with 200 µL sterile deionized water.

SDS-PAGE

KDa MW NR



MW: Molecular Weight marker reduced condition

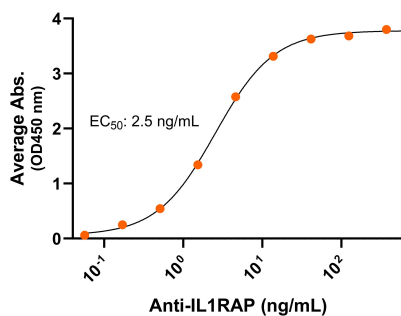
NR: IL1RAP dimer under non-reduced condition

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

Antibody Binding

Human IL1RAP-His dimer, ELISA

0.2 µg of IL1RAP dimer per well



Immobilized human IL1RAP-His dimer protein (CSP-26325-01) at 2 µg/mL (100 µL/well) can bind anti-human IL1RAP monoclonal antibody with half maximal effective concentration (EC₅₀) range of 1.3-5 ng/mL (QC tested).

Background

Human Interleukin-1 (IL1, IL-1) receptor accessory protein (IL1RAP) belongs to the Interleukin-1 receptor family and is essential for the effective signaling of IL-1 family cytokines. IL1RAP is also known as IL1AP, C3orf13, IL-1RAcP, and IL1R3. It acts as a co-receptor for signaling by members of the IL1 cytokine family and plays an important role in inflammation and immune responses. The membrane-bound isoform of IL1RAP contains an extracellular domain with three extracellular immunoglobulin domains. IL1RAP is expressed on cells required for innate and adaptive immune response, such as mast cells, monocytes, and macrophages. IL1RAP associates with IL1R1 bound to IL1 beta (IL1 β) to form the high affinity IL1 receptor complex which induces synthesis of acute phase and proinflammatory proteins during infection, damage, and stress. IL1RAP interacts with TOLLIP and IL1 receptor type 1. Dysregulated IL1RAP-mediated signaling contributes to conditions such as rheumatoid arthritis and other chronic inflammatory disorders. IL1RAP is highly expressed in hematological malignancies and solid tumors and has an essential role in progression, angiogenesis, and metastasis of tumors. IL1RAP has emerged as one of the most attractive immunotherapy targets for both hematologic malignancies and selected solid tumors.