

Summary

ARG70305 Human CD121a / IL1 Receptor1 recombinant protein (ECD) (Histagged, C-ter)

Package: 100 μg Store at: -20°C

| Product Description | HEK293 expressed, His-tagged (C-ter) Human CD121a / IL1 Receptor1 recombinant protein (ECD). |
|---------------------|--|
| Tested Reactivity | Hu |
| Tested Application | Binding, SDS-PAGE |
| Target Name | CD121a / IL1 Receptor1 |
| Species | Human |
| A.A. Sequence | Asp21 - Thr332 of Human CD121a / IL1 Receptor1 (NP_000868.1) with 6X His tag at the C-terminus. |
| Expression System | НЕК293 |
| Alternate Names | Interleukin-1 receptor alpha; sIL-1R1; p80; CD121A; mIL-1RI; IL1R; P80; Interleukin-1 receptor type I; IL1RA; D2S1473; Interleukin-1 receptor type 1; IL-1R-alpha; IL-1RT-1; CD121 antigen-like family member A; IL-1R-1; sIL-1RI; IL-1RT1; mIL-1R1; CD antigen CD121a |

Application Instructions

Application NoteBinding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant
Human IL1RA at 5µg/ml (100 µl/well) can bind Recombinant Human IL1R1 with a linear range of 63-252
ng/ml.

Properties

| Form | Powder |
|---------------------|---|
| Purification Note | 0.22 μm filter sterilized. Endotoxin level is 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) |
| Reconstitution | Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water. |
| Storage instruction | For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

| Gene Symbol | IL1R1 |
|----------------|---|
| Gene Full Name | interleukin 1 receptor, type l |
| Background | This gene encodes a cytokine receptor that belongs to the interleukin-1 receptor family. The encoded protein is a receptor for interleukin-1 alpha, interleukin-1 beta, and interleukin-1 receptor antagonist. It is an important mediator involved in many cytokine-induced immune and inflammatory responses. This gene is located in a cluster of related cytokine receptor genes on chromosome 2q12. [provided by RefSeq, Dec 2013] |

| Function | Receptor for IL1A, IL1B and IL1RN. After binding to interleukin-1 associates with the coreceptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK and other pathways. Signaling involves the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the respective TIR domains of the receptor/coreceptor subunits. Binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. Involved in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (PubMed:10653850). [UniProt] |
|-----------------------|---|
| Calculated Mw | 65 kDa |
| PTM | A soluble form (sIL1R1) is probably produced by proteolytic cleavage at the cell surface (shedding). |
| | Rapidly phosphorylated on Tyr-496 in response to IL-1, which creates a SH2 binding site for the PI 3-kinase regulatory subunit PIK3R1. [UniProt] |
| Cellular Localization | Membrane; Single-pass type I membrane protein. Cell membrane. Secreted. [UniProt] |
| | |
| Images | |

