Recombinant Human IL-1R1/CD121a Protein

Catalog No.: RP01036

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Sequence Information

Species
Human

Gene ID
3554

Swiss Prot
P14778

Tags
C-His

Synonyms
IL1R1,CD121A,D2S1473,IL-1R-alpha,IL1R,IL1RA,P80

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
36.70 kDa

Observed MW
Approximately 55 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Interleukin 1 receptor, type I (IL-1R1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. The protein encoded by this gene is a cytokine receptor that belongs to the interleukin-1 receptor family. This protein is a receptor for interleukin 1 alpha (IL1A), interleukin 1 beta (IL1B), and interleukin 1 receptor antagonist (IL1RA). The shape change and subsequent repair processes are IL-1β activity-dependent, acting through the IL-1 type 1 receptor (IL-1R1), as co-application of the IL-1type 1 receptor antagonist protein (IL-1ra) blocks IL-1β induced effects. This gene along with interleukin 1 receptor, type II (IL1R2), interleukin 1 receptor-like 2 (IL1RL2), and interleukin 1 receptor-like 1 (IL1RL1) form a cytokine receptor gene cluster in a region mapped to chromosome 2q12. It has been suggested that the Type II receptor, either as the membrane-bound or as the soluble form, serves as a decoy for IL-1 and inhibits IL-1 action by blocking the binding of IL-1 to the signaling Type I receptor complex. Recombinant IL-1 soluble receptor Type I is a potent antagonist of IL-1 action.

Basic Information

Description
Recombinant Human IL-1R1/CD121a Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp21-Thr332) of human IL1R1 (Accession #NP_000868.1) fused with a 6×His tag at the C-terminus.

Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human IL1RA at 5 μg/mL (100 μL/well) can bind Recombinant Human IL1R1 with a linear range of 63-252 ng/mL.
2.Measured by its binding ability in a functional ELISA. Immobilized Human IL-1 beta (Catalog: RP00002) at 10 μg/mL (100 μL/well) can bind Biotinylated Human IL-1R1 (Catalog: RP01036) with a linear range of 0.002-1 μg/mL.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

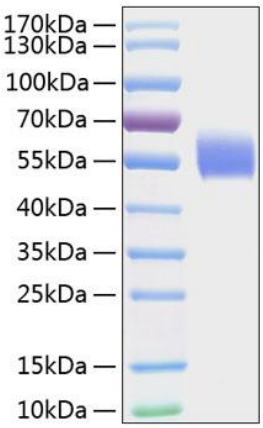
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

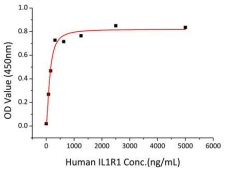
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Please visit http://abclonal.com for a complete listing of recommended products.

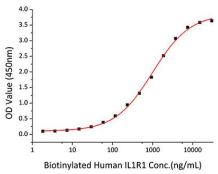
Validation Data



Recombinant Human IL-1R1/CD121a Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Recombinant Human IL1RA at 5μg/mL (100 μL/well) can bind Recombinant Human IL1R1 with a linear range of 63-252 ng/mL.



Immobilized Human IL-1 beta (Catalog: RP00002) at 10 μg/mL (100 μL/well) can bind Biotinylated Human IL-1R1 (Catalog: RP01036) with a linear range of 0.002-1 μg/mL.