

Datasheet for ABIN7196333

IL1R1 Protein (His tag)



Overview

| Quantity: | 100 μg |
|-------------------------------|--|
| Target: | IL1R1 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This IL1R1 protein is labelled with His tag. |

Product Details

| Purpose: | Recombinant Human IL1R1/CD121a Protein (His Tag)(Active) |
|------------------------------|---|
| Sequence: | Met 1-Thr 332 |
| Characteristics: | A DNA sequence encoding the extracellular domain of human IL1R1 (NP_000868.1) (Met 1-Thr 332) was expressed with a fused polyhistidine tag at C-terminus. |
| Purity: | > 97 % as determined by reducing SDS-PAGE. |
| Endotoxin Level: | < 1.0 EU per µg as determined by the LAL method. |
| Biological Activity Comment: | Measured by its ability to bind human IL1-beta in a functional ELISA. |

Target Details

| Target: | IL1R1 |
|-------------------|-------------------------------|
| Alternative Name: | IL1R1/CD121a (IL1R1 Products) |

Background:

Background: Interleukin 1 receptor, type I (IL-1R1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. IL-1R1/CD121a is a cytokine receptor that belongs to the interleukin 1 receptor family. This protein is a receptor for interleukin alpha (IL1A), interleukin beta (IL1B), and interleukin 1 receptor, type I (IL1R1/IL1RA). IL-1R1/CD121a is an important mediator involved in many cytokine induced immune and inflammatory responses. This protein has been characterized by pharmacological and molecular techniques in the mouse brain. The spindle-shaped astrocytes enclose the wound, separating the healthy from damaged neural tissue. The shape change and subsequent repair processes are IL-1B 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. In the spleen, a slight increase in IL-1R AcP and IL-1R1 was observed during the first hours following LPS stimulation. In conclusion, IL-1R AcP mRNA is expressed in the brain and in other tissues where IL-1R1/CD121a transcripts are found. However, the regulation of its expression is distinct from IL-1R1/CD121a. The high level of expression and the lack of regulation of IL-1R AcP transcripts in the brain under inflammatory conditions suggest that the protein might be constitutively expressed in excess.

Synonym: CD121A;D2S1473;IL-1 RI;IL-1R-alpha;IL-1R1;IL1R;IL1RA;P80;Interleukin-1 receptor type 1; IL-1R-1; IL-1RT-1; IL-1RT1; CD121 antigen-like family member A; Interleukin-1 receptor alpha; IL-1R-alpha

Molecular Weight:

37.7 kDa

NCBI Accession:

NP_000868

Pathways:

NF-kappaB Signaling, Carbohydrate Homeostasis, Cancer Immune Checkpoints

Application Details

Restrictions:

For Research Use only

Handling

| Format: | Lyophilized |
|------------------|---|
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Buffer: | Lyophilized from sterile PBS, pH 7.4 |
| Storage: | 4 °C,-20 °C,-80 °C |
| Storage Comment: | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. |

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.