

# **IL-1RAcP Antibody**

Catalog # ASC10067

## **Specification**

# **IL-1RAcP Antibody - Product Information**

**Application** WB, ICC **Primary Accession Q9NPH3** 

Other Accession NP 002173, 2599126

Reactivity Human Host Rabbit Clonality **Polyclonal** laG

Isotype

Calculated MW Predicted: 63 kDa

Observed: 63 kDa KDa

**Application Notes** IL-1RAcP antibody can be used for

detection of IL-1RAcP by Western blot 0.5 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL.

### **IL-1RAcP Antibody - Additional Information**

Gene ID 3556

**Other Names** 

IL-1RACP Antibody: IL1R3, C3orf13, IL-1RACP, IL1R3, Interleukin-1 receptor accessory protein, Interleukin-1 receptor 3, IL-1 receptor accessory protein, interleukin 1 receptor accessory protein

# Target/Specificity

IL1RAP; It has no cross activity to other member in the IL-1 receptor family.

### **Reconstitution & Storage**

IL-1RAcP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

### **Precautions**

IL-1RACP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **IL-1RAcP Antibody - Protein Information**

Name IL1RAP

Synonyms C3orf13, IL1R3

## **Function**

Coreceptor for IL1RL2 in the IL-36 signaling system (By similarity). Coreceptor with IL1R1 in the IL-1 signaling system. Associates with IL1R1 bound to IL1B to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B and other



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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. Recruits TOLLIP to the signaling complex. Does not bind to interleukin-1 alone; binding of IL1RN to IL1R1, prevents its association with IL1R1 to form a signaling complex. The cellular response is modulated through a non-signaling association with the membrane IL1R2 decoy receptor. Coreceptor for IL1RL1 in the IL-33 signaling system. Can bidirectionally induce pre- and postsynaptic differentiation of neurons by trans-synaptically binding to PTPRD (By similarity). May play a role in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (Probable).

#### **Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted.

#### **Tissue Location**

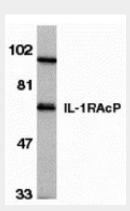
Detected in liver, skin, placenta, thymus and lung. Isoform 4 is predominantly expressed in brain. Overexpressed on candidate chronic myeloid leukemia (CML) stem cells, hematopoietic stem cells and mononuclear cells of patients with acute myeloid leukemia (AML). Overexpressed in patients with chronic obstructive pulmonary disease (COPD). Expressed in T-helper 1 (Th1) and T-helper 2 (Th2) cell subsets (PubMed:10653850).

### **IL-1RAcP Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

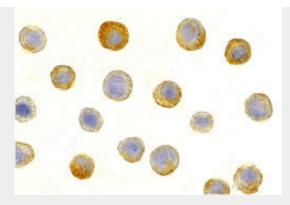
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

## **IL-1RAcP Antibody - Images**



Western blot analysis of IL-1RAcP in HeLa whole cell lysate with IL-1RAcP antibody at 1  $\mu$ g/ml.





Immunocytochemistry of IL-1RAcP in HeLa cells with IL-1RAcP antibody at 5 μg/mL.

### IL-1RAcP Antibody - Background

IL-1RAcP Antibody: The pro-inflammatory cytokine IL-1 induced cellular response requires two subunits of its receptor, IL-1 receptor I(IL-1RI) and IL-1 receptor accessory protein (IL-1RAcP). IL-1 RAcP forms a complex with IL-1RI in response to IL-1 treatment. The IL-1 receptor-associated kinase (IRAK), which mediates activation of NF-κB inducing kinae (NIK) and of NF-κB, recruites to the IL-1R complex through IL-1 RAcP. IL-1 activation of stress-activated protein kinase and of acid sphingomyelinase also requires IL-1RAcP. Like IL-1RI, IL-1RAcP subunit is essential for IL-1 mediated cellular response. IL-1RAcP is expressed in many tissues.

### **IL-1RAcP Antibody - References**

Greenfeder SA, Nunes P, Kwee L, et al. Molecular cloning and characterization of a second subunit of the interleukin 1 receptor complex. J. Biol. Chem. 1995;270:13757-65.

Huang J, Gao X, Li S, et al. Recruitment of IRAK to the interleukin 1 receptor complex requires interleukin 1 receptor accessory protein. Proc. Natl. Acad. Sci. USA 1997; 94:12829-32.

Wesche H, Korherr C, Kracht M, et al. The interleukin-1 receptor accessory protein (IL-1RAcP) is essential for IL-1-induced activation of interleukin-1 receptor-associated kinase (IRAK) and stress-activated protein kinases (SAP kinases). J. Biol. Chem. 1997;272:7727-31.

Hofmeister R, Wiegmann K, Korherr C, et al. Activation of acid sphingomyelinase by interleukin-1 (IL-1) requires the IL-1 receptor accessory protein. J. Biol. Chem. 1997; 272:27730-6.