

IL-1RAcP Antibody

Catalog # ASC10066

Product Information

Application	WB, E
Primary Accession	Q9NPH3
Other Accession	NP_001161401 , 2599126
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	65418
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-1RAcP antibody can be used for detection of IL-1RAcP by Western blot at 1 µg/mL.

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; This polyclonal antibody has no cross activity to other members 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.

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 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).

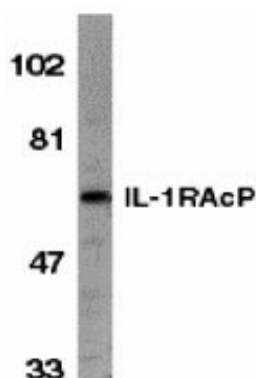
Background

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-1RAcP forms a complex with IL-1RI in response to IL-1 treatment. The IL-1 receptor-associated kinase (IRAK), which mediates activation of NF- κ B inducing kinase (NIK) and of NF- κ B, recruits to the IL-1R complex through IL-1RAcP. 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.

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.

Images



Western blot analysis of IL-1RAcP in HeLa whole cell lysate with IL-1RAcP antibody at 1 μ g/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.