

IL1RAP Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22327b

Product Information

Application WB, FC, IHC-P, E

Primary Accession Q9NPH3
Other Accession P59822

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB57768
Calculated MW 65418

Additional Information

Gene ID 3556

Other Names Interleukin-1 receptor accessory protein, IL-1 receptor accessory protein,

IL-1RAcP, Interleukin-1 receptor 3, IL-1R-3, IL-1R3, IL1RAP, C3orf13, IL1R3

Target/Specificity This IL1RAP antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 279-313 amino acids of human IL1RAP.

Dilution WB~~1:2000 FC~~1:25 IHC-P~~1:100~500 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions IL1RAP Antibody (Center) 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

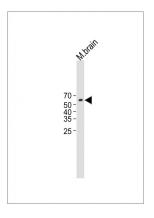
Coreceptor for IL1RL2 in the IL-36 signaling system (By similarity). Coreceptor with IL1R1 in the IL-1 signaling system. Associates with IL1R1 bound to IL1B to form the high affinity interleukin-1 receptor complex which mediates interleukin-1- dependent activation of NF-kappa-B and other pathways. Signaling 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. Secreted forms (isoforms 2 and 3) associate with secreted ligand- bound IL1R2 and increase the affinity of secreted IL1R2 for IL1B; this complex formation may be the dominant mechanism for neutralization of IL1B by secreted/soluble receptors.

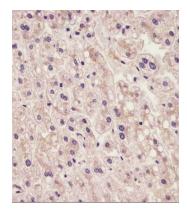
References

Huang J., et al. Proc. Natl. Acad. Sci. U.S.A. 94:12829-12832(1997). Saito T., et al. Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases. Jensen L.E., et al. J. Immunol. 164:5277-5286(2000). Jensen L.E., et al. Cell. Signal. 15:793-802(2003). Lu H.L., et al. Mol. Immunol. 45:1374-1384(2008).

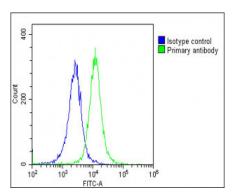
Images

All lanes: Anti-IL1RAP Antibody (Center)at 1:2000 dilution Lane 1:Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size:60kDa Blocking/Dilution buffer: 5% NFDM/TBST.





AP22327b staining IL1RAP in human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing Hela cells stained with AP22327b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22327b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.

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