abcam

ab279599

APC Anti-IL1 Receptor I/IL-1R-1 antibody [191]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 99.41% Deionized Water (H20), 0.5% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Mouse Il1r1. Database link P13504
Clone number	191
Purification technique	Affinity purification Protein A
Specificity	Mouse IL-1R1 / CD121a
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	Concentration: 10 µl/Test, 0.1 mg/ml

Target data

See full target information Il1r1

Function	Receptor for IL1A, IL1B and IL1RN. After binding to interleukin-1 associates with the coreceptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK 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. Binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. Involved in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (By similarity). Isoform 2. Unable to mediate canonical IL-1 signaling. Cooperates with IL1RAP isoform 3 to mediate IL1B-induced neuronal activity including IL1B-potentiated NMDA-induced calcium influx mediated by Akt kinase activation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze, Store in the dark

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The IL-1 Receptor I also known as IL-1R1 is a transmembrane protein with alternative names such as IL-1 receptor and IL-1 type I receptor. It acts as an important receptor for the pro-inflammatory cytokine Interleukin-1 (IL-1) family primarily IL-1α and IL-1β. IL-1R1 has a mass of approximately 80 kilodaltons and is expressed in a variety of cell types including endothelial cells epithelial cells and fibroblasts. It is also present on immune cells like monocytes and macrophages making it widespread in a vast range of tissues.
Biological function summary	IL-1R1 is a critical player in the initiation of immune responses serving as a component of the IL-1 signaling complex. When IL-1 binds to IL-1R1 it recruits the IL-1 receptor accessory protein (IL-1RAcP) to form a signaling complex that triggers downstream pathways. This interaction initiates a signaling cascade that activates nuclear factor-kappa B (NF-κB) and mitogen-activated protein kinases (MAPKs) promoting the expression of inflammatory genes and mediating immune and inflammatory responses.
Pathways	IL-1R1 is central to the inflammatory response and immune signaling pathways. The IL-1 receptor complex facilitates the activation of NF-κB which plays a role in the body's response to stress cytokines and pathogens. The receptor acts in close relation with other proteins like IL-1RAcP and IRAKs (Interleukin-1 receptor-associated kinases) in these pathways creating a robust immune signaling network that drives the inflammatory response.
Associated diseases and disorders	IL-1R1 is closely associated with inflammatory conditions such as rheumatoid arthritis and inflammatory bowel disease. Increased IL-1R1 expression and signaling contribute to chronic inflammation in these diseases. The interaction of IL-1β with IL-1R1 and subsequently with proteins like NF-κB leads to the persistence of inflammatory signals. Moreover targeting IL-1R1 and related proteins offers potential therapeutic strategies in mitigating the symptoms and progression of inflammatory disorders.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

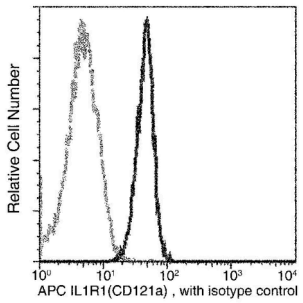
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

1 product image



Flow Cytometry - APC Anti-IL1 Receptor I/IL-1R-1 antibody [191] (ab279599)

IL1 Receptor I/IL-1R-1 Flow Cytometry staining using rabbit Anti-IL1 Receptor I/IL-1R-1 antibody

Flow cytometric analysis of Mouse IL1R1(CD121a) expression on NIH/3T3 cells. Cells were stained with ab279599 (Black peak) along with an isotype control (grey peak). The histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.

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