

# Mouse Monoclonal Antibody to Human IL1R3 / IL1RAP



Sino Biological Inc.  
Biological Solution Specialist

Catalog Number: 10121 - MM05

General Information	
Immunogen:	Recombinant human IL1R3 protein ( <a href="#">Catalog#10121-H08H</a> )
Clone ID:	7E4G1E8
Ig Type:	Mouse IgG2a
Applications:	WB , ELISA
Specificity:	Human IL1R3 / IL1RAP
Formulation:	0.2 µm filtered solution in PBS with 5% trehalose
Storage:	< -20° C

## Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, human cell-derived, recombinant human IL1R3 / IL1RAP ( rh IL1R3 ; [Catalog#10121-H08H](#) ; NP\_002173.1 ; Met 1 - Glu 359 ). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

## Applications

**Western blot** – This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human IL1R3 in WB. Using a DAB detection system, the detection limit for human IL1R3 is approximately 4 ng/lane under non-reducing conditions and **2 ng/lane** under reducing conditions

**Direct ELISA** – This antibody can be used at 0.5 - 1 µg/mL with the appropriate secondary reagents to detect human IL1R3. The detection limit for human IL1R3 is **0.16 ng/well**

## Specificity

Human IL1R3. **No cross-reactivity** with human cell lysate (293 cell line) in WB and ELISA

## Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -70°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

## Background

IL-1 receptor accessory protein (IL-1RAcP), also called as IL1R3, is identified as a subunit of membrane-bound form of the IL-1 receptor. It contains three Ig-like C2-type domains in the extracellular region and a long cytoplasmic domain implicated in signal transduction. Two alternative splice variants of IL-1RAcP have been identified: membrane-bound IL-1RAcP (mIL-1RAcP) promotes intracellular IL-1 signalling whereas soluble IL-1RAcP (sIL-1RAcP) contributes to the antagonism of IL-1 action by the type II decoy receptor, adding another layer of complexity to the regulation of IL-1 action. As an indispensable molecule in the IL-1 receptor signal transduction, IL-1RAcP is necessary to link events on the plasma membrane level to downstream signaling pathways. The intracellular signaling of IL-1 mediated by the membrane receptor involves formation of a ternary receptor complex containing IL1RAcP, IL1R1, adapter protein MyD88, and IL-1R-associated kinases IRAK1 or IRAK2 which is capable of associating directly with either IL1R1 or IL1RAcP. Subsequently, multiple cellular responses are generated including NF-κB activation, IL-2 secretion, and IL-2 promoter activation.

## Reference

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