

Mouse Monoclonal Antibody to Human

IL-1R2 / CD121b

Catalog Number: 10111-MM04



Sino Biological Inc.

Biological Solution Specialist

General Information	
Immunogen:	Recombinant Human IL1R2 protein (Catalog#10111-H08H)
Clone ID:	7H4D4F8
Ig Type:	Mouse IgG1
Applications:	ELISA
Specificity:	Human IL-1R2 / CD121b
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, recombinant Human IL-1R2 / CD121b (rh IL-1R2 / CD121b; Catalog#10111-H08H; NP_004624.1; Met 1-Glu 343). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

Applications

Direct ELISA – This antibody can be used at 0.5-1 µg/mL with the appropriate secondary reagents to detect Human IL1R2. The detection limit for Human IL1R2 is approximately 0.039 ng/well.

Specificity

Human IL-1R2 / CD121b

No cross-reactivity in ELISA with

Human IL1RA
Human IL1R1
Human IL1R3
Human IL1R4
Human IL1R8
Human IL1R9
Human IL18R1

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

The pleiotropic cytokine IL1 is produced to regulate development and maintenance of the inflammatory responses, and binds to specific plasma membrane receptors on cells. Two distinct types of IL1 receptors which are able to bind IL1 specifically have been identified, designated as IL1RI (IL1RA) and IL1RII (IL1RB). A closely related receptor-like chain IL1R accessory protein (IL1RAcP) has been reported to heterodimerize with the IL1RI to form the signal transduction complex which appears to mediate all the known IL1 signal processes. IL1RII structurally consisting of a ligand binding portion comprised of three Ig-like domains, a single transmembrane region, and a short cytoplasmic domain, is expressed in a variety of cell types including B lymphocytes, neutrophils, monocytes, large granular leukocytes and endothelial cells. Like the IL1RI, the human IL1RII can bind all three forms of IL1 (IL1 alpha, IL1 beta and IL1ra) but does not transmit IL1 signals. In addition to the membrane-bound form, IL1RII also exists as the soluble form, and either acts as a decoy receptor that inhibits IL1 action by blocking the binding of IL1 to the type I receptor complex. Furthermore, IL4 is reported to antagonize the activity of IL1 by inducing the expression and release of this cytokine. Recombinant soluble IL1RII is thus a potent antagonist of IL1 action, and serves as a potential therapeutic target.

Reference

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2. Liu, C. et al., 1996, J. Biol. Chem. 271: 20965-20972.
3. Rauschmayr, T. et al., 1997, Proc. Natl. Acad. Sci. U.S.A. 94: 5814-5819.
4. Neumann, D. et al., 2000, J. Immunol. 165: 3350-3357.
5. Colotta, F. et al., 1993, Science. 261: 472-475.

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