For Research Use Only

IL-1R1 Recombinant antibody

Catalog Number:84094-6-RR



Basic Information

Catalog Number: 84094-6-RR

Size: 1000 µ g/ml Source: Rabbit Isotype: GenBank Accession Number: NM_008362.2 GeneID (NCBI):

16177 UNIPROT ID: P13504-1 Full Name:

interleukin 1 receptor, type I

Calculated MW: 67 kDa Observed MW: 75-100 kDa Purification Method:

Protein A purfication CloneNo.:

241392G7

Recommended Dilutions: WB 1:1000-1:4000 IHC 1:50-1:500 IF/ICC 1:125-1:500

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: mouse liver tissue, EL-4-B5 cells

IHC: mouse liver tissue, IF/ICC: NIH/3T3 cells,

Background Information

IL-1R1 (IL-1 receptor type 1, also known as p80, IL-1R-alpha or CD121a) is a 80 kDa transmembrane glycoprotein and a member of the interleukin-1 receptor family (PMID: 35163653; 29248002). It is a receptor for IL-1 α , IL-1 β , and interleukin-1 receptor antagonist (IL-1Ra). IL-1 α and IL-1 β interact with the extracellular domain of IL-1R1, triggering the recruitment of an accessory receptor, the IL-1RAcP, resulting in a functional receptor complex that initiates IL-1R1 signaling cascades (PMID: 35163653). IL-1Ra competes with active IL-1 and blocks binding to their common activating receptor IL-1R1 and, thus, inhibits IL-1 signaling (PMID: 35332327; 11641511). It has been reported that IL-1R1 may also bind IL-38 (PMID: 29248002). IL-1R1 expression has been found in many cell types including T cells, macrophages, neutrophils, eosinophils, basophils, mast cells, fibroblasts, and endothelial cells. IL-1R1 can be released from the cell surface following proteolytic cleavage, generating a soluble form of 55-60 kDa (PMID: 17324958).

Storage

Storage:

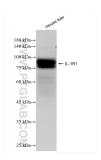
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

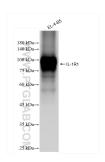
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



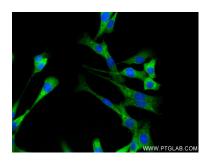
mouse liver tissue were subjected to SDS PAGE followed by western blot with 84094-6-RR (IL-1R1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



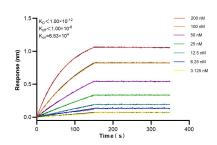
EL-4-B5 cells were subjected to SDS PAGE followed by western blot with 84094-6-RR (IL-1R1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 84094-6-RR (IL-1R1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using IL-1R1 antibody (84094-6-RR, Clone: 241392G7) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 84094-6-RR against Mouse IL-1R1 were performed. The affinity constant is below 1 pM.