

Rat IL1 Receptor 1 protein, His tag

Cat. No. GTX00052-pro

Applications	Functional Assay	Package 10 μg
Species	Rat	13

Applications

Application Note

IL1R1 (Interleukin 1 Receptor Type I), also known as CD121a, is an important mediator involved in many cytokine induced immune and inflammatory responses. It belongs to the interleukin-1 receptor family, and is a receptor for interleukin 1 alpha (IL1A), interleukin 1 beta (IL1B), and interleukin 1 receptor antagonist (IL1RA). Besides, mouse IL1B shares 87.0% AA sequence identity with rat IL1B, suggesting the exist of cross-species activity. Thus, a binding ELISA assay was constructed to detect the association of recombinant rat IL1R1 with recombinant mouse IL1B. Briefly, IL1R1 were diluted serially in PBS with 0.1% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to IL1B-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL1R1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of IL1R1 with IL1B was in a dose dependent manner.

Observed MW (kDa) 17 kDa.

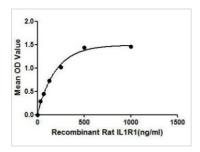
Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His-Tag; Val226~Lys352	
Expression System	E. coli	
Purity	> 97%	
Endotoxin	< 1 EU/μg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



For full product information, images and publications, please visit our <u>website</u>.

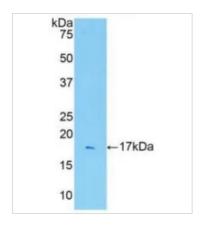
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DATA IMAGES



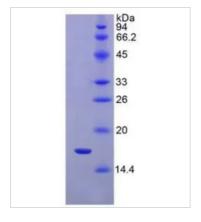
GTX00052-pro Functional Assay Image

Functional ELISA analysis of GTX00052-pro Rat IL1 Receptor 1 protein which can bind immobilized IL1B protein.



GTX00052-pro Image

WB analysis of GTX00052-pro Rat IL1 Receptor 1 protein.



GTX00052-pro Image

SDS-PAGE analysis of GTX00052-pro Rat IL1 Receptor 1 protein.



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