

# Rat IL1 Receptor 1 protein, His tag

**Cat. No. GTX00053-pro**

**Application** Functional Assay

**Species** Rat

**Package**

10 µg

## APPLICATION

### 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 µl 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 µl 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** 21 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; Asp386~Tyr553

**Expression System** E. coli

**Purity** > 97%

**Endotoxin** < 1 EU/µg

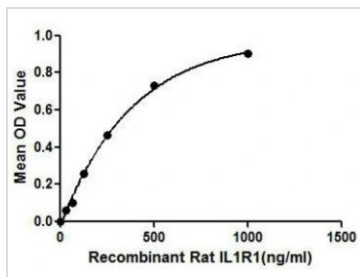
**Conjugation** Unconjugated

**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



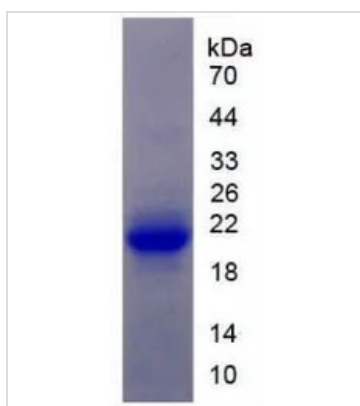
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## DATA IMAGES



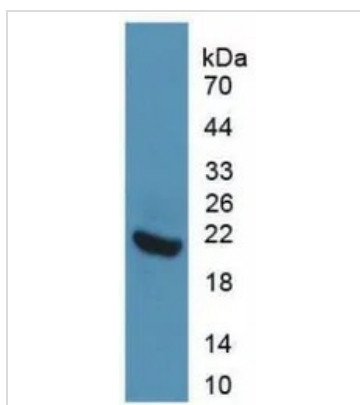
### GTX00053-pro Functional Assay Image

Functional ELISA analysis of GTX00053-pro Rat IL1 Receptor 1 protein which can bind immobilized IL1B protein.



### GTX00053-pro Image

SDS-PAGE analysis of GTX00053-pro Rat IL1 Receptor 1 protein.



### GTX00053-pro Image

WB analysis of GTX00053-pro Rat IL1 Receptor 1 protein.



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