

APA066Hu01 100µg
Active Interleukin 1 Receptor Type I (IL1R1)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Asp21~Ile109

Tags: N-terminal His-tag

Purity: >95%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays; In vivo assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 7.8

Predicted Molecular Mass: 11.6kDa

Accurate Molecular Mass: 14kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

DKCKEREEKI ILVSSANEID VRPCPLNPNE
HKGITITWYKD DSKTPVSTEQ ASRIHQHKEK LWFVPAKVED SGHYVCVVRN
SSYCLRIKI

[ACTIVITY]

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). Thus, a binding ELISA assay was conducted to detect the association of IL1R1 with IL1a. Briefly, IL1R1 were diluted serially in PBS with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IL1a-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 50µL stop solution to the wells and read at 450nm immediately. The binding activity of IL1R1 with IL1a was shown in Figure 1 and this effect was in a dose dependent manner.

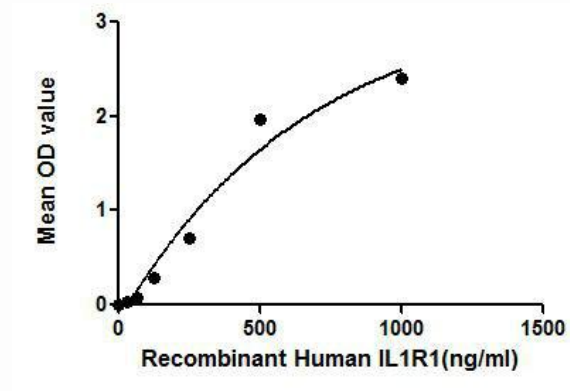


Figure 1. The binding activity of IL1R1 with IL1a.

[IDENTIFICATION]

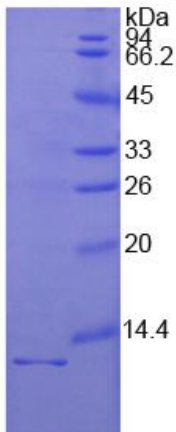


Figure 2. SDS-PAGE

Sample: Active recombinant IL1R1, Human

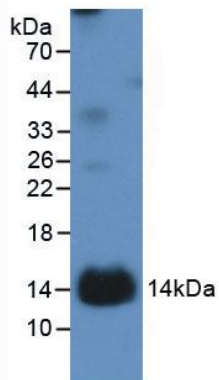


Figure 3. Western Blot

Sample: Recombinant IL1R1, Human;

Antibody: Rabbit Anti-Human IL1R1 Ab (PAA066Hu01)