

APD937Hu01 100µg
Active Peptidoglycan Recognition Protein 1 (PGLYRP1)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Gln22~Pro196

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Activity Assays.

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

Predicted isoelectric point: 8.5

Predicted Molecular Mass: 23.1kDa

Accurate Molecular Mass: 23kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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]

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QETEDPACC SPIVPRNEWK ALASECAQHL
SLPLRYVVVS HTAGSSCNTP ASCQQQARNV QHYHMKTLGW CDVGYNFLIG
EDGLVYEGRG WNFTGAHSGH LWNPMSIGIS FMGNYMDRVP TPQAIRAAQG
LLACGVAQGA LRSNYVLKGH RDVQRTLSPG NQLYHLIQNW PHYRSP
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[ACTIVITY]

Peptidoglycan Recognition Protein 1 (PGLYRP1) is a member of a family of proteins that recognize and bind to peptidoglycan, a major component of bacterial cell walls. PGLYRP1 helps defend against bacterial infections by recognizing peptidoglycans and participating in the host's immune response. It plays an important role in the immune system, activating immune cells, promoting inflammatory responses, and directly destroying bacterial cell walls. Besides, Lactoferrin (LTF) has been identified as an interactor of PGLYRP1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human PGLYRP1 and recombinant human LTF. Briefly, PGLYRP1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to LTF-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PGLYRP1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C , wells were aspirated and washed 5 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 450/630 nm immediately. The binding activity of recombinant human PGLYRP1 and recombinant human LTF was shown in Figure 1, the EC50 for this effect is 0.61 ug/mL.

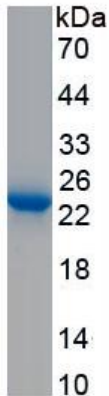


Figure 3. SDS-PAGE

Sample: Active recombinant PGLYRP1, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.