

## PRODUCT DATASHEET

### Peptidoglycan Recognition Protein 1 Human E. coli

**Cat. No.:** RD172316100

**Type:** Recombinant protein

**Size:** 0.1 mg

**Source:** E. coli

**Species:** Human

#### Description

Total 185 AA. MW: 20.68 kDa (calculated). UniProtKB acc.no. O75594 (Gln22-Pro196). N-terminal His-tag (10 extra AA). Protein identity confirmed by LC-MS/MS.

#### Other names

PGRP-S, PGLYRP1, TNFSF3L, SBBI68, UNQ639/PRO1269

#### Introduction to the molecule

Peptidoglycan recognition protein 1 binds to peptidoglycan of bacteria and affects the peptidoglycan biosynthesis. It possesses bactericidal activity towards Gram-positive bacteria and bacteriostatic towards Gram-negative bacteria. Peptidoglycan recognition protein 1 plays a role in innate immunity.

#### Research topic

Animal studies, Cardiovascular disease, Immune Response, Infection and Inflammation

#### Amino Acid sequence

MKHHHHHHAS QETEDPACCS PIVPRNEWKA LASECAQHLS LPLRYVVVSH TAGSSCNTPA SCQQQARNVQ HYHMKTGLWC  
DVGYNFLIGE DGLVYEGRGW NFTGAHSGHL WNPMSIGISF MGNVMDRVPT PQAIRAAQGL LACGVAQGAL RSNVYVLKGHR  
DVQRTLSPGN QLYHLIQNWP HYRSP

#### Purity

Purity as determined by densitometric image analysis: >90%

#### Endotoxin

< 0.1 EU/ $\mu$ g

#### Formulation:

Filtered (0.4  $\mu$ m) and lyophilized in 0.5 mg/mL in 0.05 M Acetate buffer pH=4.0

#### Reconstitution:

Add 200 $\mu$ l of 0.1M Acetate buffer pH=4.0 to prepare a working stock solution of 0.5 mg/mL and let the lyophilized pellet dissolve completely at 37°C. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 $\mu$ g/mL. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

#### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

**Storage, Stability/Shelf Life**

Store the lyophilized protein at  $-80\text{ }^{\circ}\text{C}$ . Lyophilized protein remains stable until the expiry date when stored at  $-80\text{ }^{\circ}\text{C}$ . Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at  $-80\text{ }^{\circ}\text{C}$  for long term storage. Reconstituted protein can be stored at  $4\text{ }^{\circ}\text{C}$  for a week.

**Quality control**

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

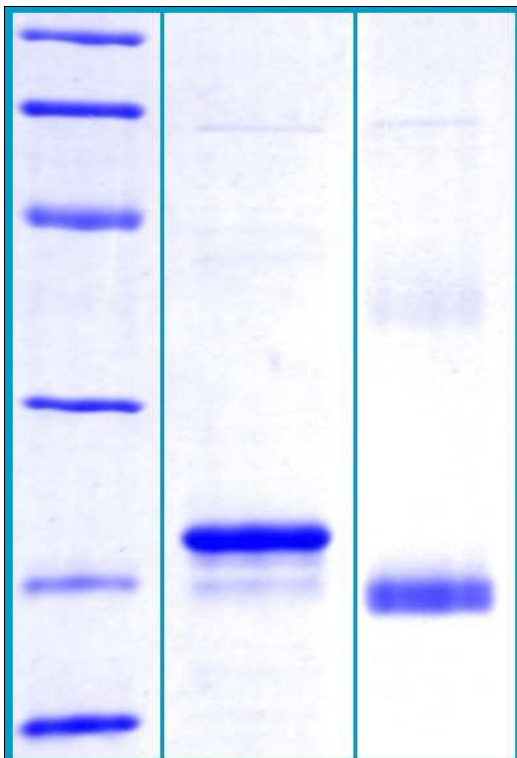
LAL to determine quantity of endotoxin.

**Applications**

ELISA, Western blotting

**Note**

This product is intended for research use only.



14% SDS-PAGE separation of Human PGRP-1:

1. M.W. marker – 97, 66, 45, 31, 21, 14 kDa
2. reduced and heated sample, 2.5  $\mu\text{g}/\text{lane}$
3. non-reduced and non-heated sample, 25  $\mu\text{g}/\text{lane}$