

# PGRP-I $\beta$ (4H229): sc-71883

## BACKGROUND

Peptidoglycan recognition proteins (PGRPs) are molecules that recognize peptidoglycan, a large component in bacterial cell walls. In insects, PGRPs activate antimicrobial pathways, and in mammals PGRPs function as anti-bacterial neutrophil proteins. PGRP-L halts bacterial growth by acting as an alanine amidase, an enzyme that hydrolyzes the amide bond of bacterial peptidoglycan. PGRP- $\alpha$  and PGRP-I $\beta$  are also members of the PGRP family that help to recognize bacteria by binding to peptidoglycan and Gram-positive bacteria, but they do not have amidase activity. These two PGRPs are expressed in the esophagus and, to a lesser extent, in the tonsils and thymus. PGRP- $\alpha$  and PGRP-I $\beta$  are transmembrane proteins of 341 and 373 amino acids, respectively, and they have at least three highly conserved C-terminal PGRP domains either in the extracellular or in the cytoplasmic (or in both) regions.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PGLYRP4 (human) mapping to 1q21.3; Pglyrp4 (mouse) mapping to 3 F1.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

PGRP-I $\beta$  (4H229) is a mouse monoclonal antibody raised against amino acids 95-110 of PGRP-I $\beta$  of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

PGRP-I $\beta$  (4H229) is recommended for detection of PGRP-I $\beta$  of mouse, rat, human and porcine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for PGRP-I $\beta$  siRNA (h): sc-62785, PGRP-I $\beta$  siRNA (m): sc-62786, PGRP-I $\beta$  shRNA Plasmid (h): sc-62785-SH, PGRP-I $\beta$  shRNA Plasmid (m): sc-62786-SH, PGRP-I $\beta$  shRNA (h) Lentiviral Particles: sc-62785-V and PGRP-I $\beta$  shRNA (m) Lentiviral Particles: sc-62786-V.

Molecular Weight of PGRP-I $\beta$ : 46 kDa.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.