

# PGRP-S (M-18): sc-55743

## 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 antibacterial 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- $\beta$  are also members of the PGRP family that help recognize bacteria by binding to peptidoglycan and Gram-positive bacteria, but they do not have amidase activity. PGRP-S participates in intracellular killing of Gram-positive bacteria by stimulating two antimicrobial defense systems, the prophenoloxidase cascade and the antimicrobial peptides through Toll receptors.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Pglyrp1 (mouse) mapping to 7 A3.

## SOURCE

PGRP-S (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PGRP-S of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55743 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PGRP-S (M-18) is recommended for detection of PGRP-S of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PGRP-S (M-18) is also recommended for detection of PGRP-S in additional species, including equine and porcine.

Suitable for use as control antibody for PGRP-S siRNA (m): sc-62791, PGRP-S shRNA Plasmid (m): sc-62791-SH and PGRP-S shRNA (m) Lentiviral Particles: sc-62791-V.

Molecular Weight of PGRP-S: 22 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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