SANTA CRUZ BIOTECHNOLOGY, INC.

PGRP-Iα (187C434): sc-52946

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-Iα and PGRP-Iβ 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-Iα and PGRP-Iβ are transmembrane proteins of 341 and 373 amino acids, respectively, and they have 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: PGLYRP3 (human) mapping to 1q21.3.

SOURCE

PGRP-Iα (187C434) is a mouse monoclonal antibody raised against amino acids 179-183 of PGRP-Iα human origin.

PRODUCT

Each vial contains 100 µl ascites containing IgG_1 with < 0.1% sodium azide.

APPLICATIONS

PGRP-Iα (187C434) is recommended for detection of PGRP-Iα of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunofluorescence (starting dilution to be determined by researcher, dilution range 1:100-1:5000) and flow cytometry (1-2 µl per 1 x 10^6 cells).

Suitable for use as control antibody for PGRP-Iα siRNA (h): sc-62787, PGRP-Iα shRNA Plasmid (h): sc-62787-SH and PGRP-Iα shRNA (h) Lentiviral Particles: sc-62787-V.

Molecular Weight of PGRP-Iα: 38 kDa.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.