

PGRP-L (B-4): sc-166646



The Power to Question

BACKGROUND

Peptidoglycan recognition protein-L (PGRP-L) is a pattern recognition molecule consisting of 576 amino acid residues. It is the longest and most widely expressed member of the PGRP family. PGRP-L is a Zn²⁺-dependent protein with N-acetylmuramyl-L-alanine-amidase activity that digests peptidoglycan. PGRP-L can form a homodimer and may dimerize with other PGRP proteins. It is a secreted serum protein but is also expressed as a transmembrane protein in liver parenchymal cells binding peptidoglycan and Gram-positive bacteria. PGRP-L deficient mice exhibit slightly lower levels of IL-6 and TNF α but exhibit no obvious phenotypic abnormalities. This suggests that PGRP-L may play a minor role in innate immune functions. In addition, PGRP-L may be a key player in the activation of NOD1, an intracellular pattern recognition protein.

CHROMOSOMAL LOCATION

Genetic locus: PGLYRP2 (human) mapping to 19p13.12; Pglyrp2 (mouse) mapping to 17 B1.

SOURCE

PGRP-L (B-4) is a mouse monoclonal antibody raised against amino acids 22-321 mapping near the N-terminus of PGRP-L of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PGRP-L (B-4) is available conjugated to agarose (sc-166646 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166646 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166646 PE), fluorescein (sc-166646 FITC), Alexa Fluor[®] 488 (sc-166646 AF488), Alexa Fluor[®] 546 (sc-166646 AF546), Alexa Fluor[®] 594 (sc-166646 AF594) or Alexa Fluor[®] 647 (sc-166646 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166646 AF680) or Alexa Fluor[®] 790 (sc-166646 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PGRP-L (B-4) is recommended for detection of PGRP-L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PGRP-L siRNA (h): sc-62788, PGRP-L siRNA (m): sc-62789, PGRP-L shRNA Plasmid (h): sc-62788-SH, PGRP-L shRNA Plasmid (m): sc-62789-SH, PGRP-L shRNA (h) Lentiviral Particles: sc-62788-V and PGRP-L shRNA (m) Lentiviral Particles: sc-62789-V.

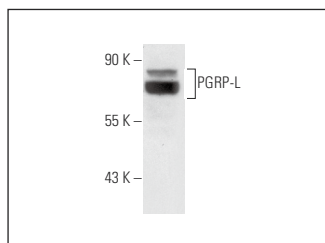
Molecular Weight of PGRP-L: 74 kDa.

Positive Controls: human plasma extract: sc-364374 or mouse liver extract: sc-22556.

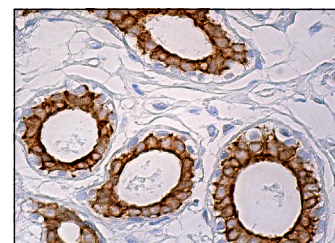
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PGRP-L (B-4): sc-166646. Western blot analysis of PGRP-L expression in mouse liver tissue extract.



PGRP-L (B-4): sc-166646. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Tabellini, G., et al. 2004. Novel 2'-substituted, 3'-deoxy-phosphatidyl-myoinositol analogues reduce drug resistance in human leukaemia cell lines with an activated phosphoinositide 3-kinase/Akt pathway. *Br. J. Haematol.* 126: 574-582.
2. Matsuzawa-Ishimoto, Y., et al. 2022. The $\gamma\delta$ IEL effector API5 masks genetic susceptibility to Paneth cell death. *Nature* 610: 547-554.

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 for detailed protocols and support products.