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PGLYRP1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP18597b

Specification

PGLYRP1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O75594

PGLYRP1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 8993

Other Names
Peptidoglycan recognition protein 1, Peptidoglycan recognition protein short, PGRP-S, PGLYRP1, PGLYRP, PGRP, TNFSF3L

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PGLYRP1 Antibody (C-term) Blocking Peptide - Protein Information

Name PGLYRP1

Synonyms PGLYRP, PGRP, TNFSF3L

Function
Innate immunity protein that plays several important functions in antimicrobial and antitumor defense systems. Acts as a pattern receptor that binds to murein peptidoglycans (PGN) of Gram-positive bacteria and thus provides bactericidal activity (PubMed:9707603). Forms an equimolar complex with heat shock protein HSPA1A and induces programmed cell death through apoptosis and necroptosis in tumor cell lines by activating the TNFR1 receptor on the target cell membrane (PubMed:21247889, PubMed:26183779). In addition, acts in complex with the Ca(2+)-binding protein S100A4 as a chemoattractant able to induce lymphocyte movement (PubMed:26654597). Mechanistically, this complex acts as a ligand of the chemotactic receptors CCR5 and CXCR3 which are present on the cells of the immune system (PubMed:30713770). Also promotes the activation of lymphocytes that become able to kill virus-infected cells as well as

tumor cells by modulating the spectrum of their target-cell specificity (PubMed:28977785, PubMed:29083508). Induction of cytotoxicity on monocyte surface requires interaction with TREM1 receptor (PubMed:25595774, PubMed:28977785).

Cellular Location
Secreted. Cytoplasmic granule

Tissue Location
Highly expressed in bone marrow. Weak expression found in kidney, liver, small intestine, spleen, thymus, peripheral leukocyte, lung, fetal spleen and neutrophils

PGLYRP1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

PGLYRP1 Antibody (C-term) Blocking Peptide - Images

PGLYRP1 Antibody (C-term) Blocking Peptide - Background

PGLYRP1 is a pattern receptor that binds to murein peptidoglycans (PGN) of Gram-positive bacteria. Has bactericidal activity towards Gram-positive bacteria. May kill Gram-positive bacteria by interfering with peptidoglycan biosynthesis. Binds also to Gram-negative bacteria, and has bacteriostatic activity towards Gram-negative bacteria. Plays a role in innate immunity.

PGLYRP1 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Dukhanina, E.A., et al. Proc. Natl. Acad. Sci. U.S.A. 106(33):13963-13967(2009)Rohatgi, A., et al. Atherosclerosis 203(2):569-575(2009)Dukhanina, E.A., et al. Bull. Exp. Biol. Med. 145(2):191-193(2008)