PGLYRP1/PGRP-S Protein, Human (HEK293, Fc)

Cat. No.:	HY-P78014
Synonyms:	PGRP-S; PGLYRP1; PGLYRP; PGRP; TNFSF3L; PGRP-SMGC126894; PGRPSMGC126896; TAG7; Tasg7
Species:	Human
Source:	HEK293
Accession:	O75594 (Q22-P196)
Gene ID:	8993
Molecular Weight:	50-65 kDa

PROPERTIES

Biological Activity	1.Immobilized Human TREM1, His Tag at 5 μg/mL (100 μl/well) on the plate. Dose response curve for Human PGLYRP1, hFc Tag with the EC_{50} of ≤0.32 μg/mL determined by ELISA. 2.Human PGLYRP1, hFc Tag captured on CM5 Chip via Protein A can bind Human TREM1, His Tag with an affinity ≤ 26.36 μM as determined in SPR assay (Biacore T200).
Appearance	Solution
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year from date of receipt. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

DESCRIPTION

Background	PGLYRP1/PGRP-S protein, an integral component of the innate immune system, serves crucial roles in antimicrobial and antitumor defense mechanisms. Functioning as a pattern receptor, it binds to murein peptidoglycans (PGN) from Gram-positive bacteria, exerting bactericidal activity. Furthermore, PGLYRP1 forms an equimolar complex with heat shock protein HSPA1A, inducing programmed cell death through apoptosis and necroptosis in tumor cell lines by activating the TNFR1 receptor. Acting in conjunction with the Ca(2+)-binding protein S100A4, it acts as a chemoattractant, capable of inducing lymphocyte movement by interacting with chemotactic receptors CCR5 and CXCR3 on immune system cells. This complex also promotes the activation of lymphocytes, enhancing their ability to eliminate virus-infected and tumor cells. The induction of cytotoxicity on monocyte surfaces requires interaction with the TREM1 receptor. PGLYRP1 forms homodimers through disulfide linkages and interacts with various proteins such as HSPBP1, TNFRSF1A, S100A4, and TREM1, orchestrating a network of interactions crucial for its diverse functions.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA