Phosphoglucomutase-Like Protein 5 (PGM5) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Phosphoglucomutase-like protein 5 (PGM5), ELISA Kit
Full Product Name	Human Phosphoglucomutase-like protein 5 (PGM5) ELISA Kit
Product Gene Name	PGM5 elisa kit
Species Reactivity	Human
Assay Type	Sandwich
Samples	Serum, Plasma, Other biological fluids
Specificity	This assay has high sensitivity and excellent specificity for detection of Human PGM5. No significant cross-reactivity or interference between Human PGM5 and analogues was observed.
Preparation and Storage	Store at 2-8 degree C.
Molecular Weight	41,790 Da
OMIM	AK297108 mRNA
3D Structure	ModBase 3D Structure for Q15124
Sample Volume	1-200 uL
Precision	Intra-assay Precision (Precision within an assay) Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays) Three samples of known concentration were tested in forty separate assays to assess inter-assay precision. CV (%) = SD/meanX100 Intra-Assay: CV Inter-Assay: CV
Detection Wavelength	450 nm
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for PGM5 elisa kit	Principle of the Assay: This assay employs a two-site sandwich ELISA to quantitate PGM5 in samples. An antibody specific for PGM5 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPGM5 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PGM5 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PGM5 bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of PGM5 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PGM5 purchase	MBS283563 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Phosphoglucomutase-like protein 5 (PGM5) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing PGM5. The ELISA analytical biochemical technique of the MBS283563 kit is based on PGM5 antibody-PGM5 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect PGM5 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, PGM5. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PGM5. It may not necessarily be applicable to this product.

NCBI GI #	133922562
NCBI GeneID	5239
NCBI Accession #	NP_068800.2
UniProt Primary Accession #	Q15124
UniProt Secondary Accession #	Q5VYV3; Q8N527; Q9UDH4; B1AM46; B4DLQ6
UniProt Related Accession #	Q15124
GenBank Nucleotide #	NM_021965.3
NCBI Official Full Name	phosphoglucomutase-like protein 5
NCBI Official Synonym Full Names	phosphoglucomutase 5
NCBI Official Symbol	PGM5
NCBI Official Synonym Symbols	PGMRP
UniProt Protein Name	Phosphoglucomutase-like protein 5
UniProt Synonym Protein Names	Aciculin; Phosphoglucomutase-related protein; PGM-RP
Protein Family	Phosphoglucomutase-like protein
UniProt Gene Name	PGM5
UniProt Synonym Gene Names	PGMRP; PGM-RP
NCBI Protein Information	phosphoglucomutase-like protein 5
NCBI Summary for PGM5	Phosphoglucomutases (EC 5.2.2.2.), such as PGM5, are phosphotransferases involved in interconversion of glucose-1-phosphate and glucose-6-phosphate. PGM activity is essential in formation of carbohydrates from glucose-6-phosphate and in formation of glucose-6-phosphate from galactose and glycogen (Edwards et al., 1995 [PubMed 8586438]).[supplied by OMIM, Mar 2008]
UniProt Comments for PGM5	PGM5: Component of adherens-type cell-cell and cell-matrix junctions. Lacks phosphoglucomutase activity. Belongs to the phosphohexose mutase family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Cytoskeletal Chromosomal Location of Human Ortholog: 9q21.11 Cellular Component: cell-cell adherens junction; costamere; cytoplasmic side of plasma membrane; cytosol; dystrophin-associated glycoprotein complex; focal adhesion; intercalated disc; sarcolemma; spot adherens junction; stress fiber; Z disc Molecular Function: magnesium ion binding; phosphoglucomutase activity; structural molecule activity Biological Process: cell adhesion; galactose catabolic process; glucose metabolic process; glycogen biosynthetic process
Research Articles on PGM5	**1.** Aciculin interacts with filamin C and Xin and is essential for myofibril assembly.
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