

# Recombinant Human PGM1 protein, His-tagged

**Cat. No.** PGM1-41H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant human PGM1, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.                                                                                                                                                                                                                                                                                                                                |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>      | PGM1 also known as Phosphoglucomutase-1 isoform 1. PGM1 belongs to the phosphohexose mutase family. There are several PGM isozymes, which are catalyze the transfer of phosphate between the 1 and 6 positions of glucose. In most cell types, PGM1 isozymes predominate, representing about 90% of total PGM activity. Defects in PGM1 are the cause of glycogen storage disease type 14.                                                                                   |
| <b>Form</b>             | Liquid. In Phosphate Buffered Saline(pH 7.4) containing 10% glycerol                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Molecular Mass</b>   | 63.8 kDa (585aa)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>AA Sequence</b>      | MGSSHHHHHH SSGLVPRGSH MGSMVKIVTV KTQAYQDQKP GTSGLRKRVK<br>VFQSSANYAE NFIQSIISTV EPAQRQEATL VVGGDGRFYM KEAIQLIARI<br>AAANGIGRLV IGQNGILSTP AVSCIIRKIK AIGGIILTAS HNPGGPNGDF<br>GIKFNISNGG PAPEAITDKI FQISKTIIEY AVCPDLKVDL GVLGKQQFDL<br>ENKFKPFTVE IVDSVEAYAT MLRSIFDFSA LKELLSGPNR LKIRIDAMHG<br>VVGYPYVKIL CEELGAPANS AVNCVPLEDF GGHPDPNLT YAADLVETMK<br>SGEHDFGA AF DGDGDRNMIL GKHGFFVNPS DSVAVIAANI FSIPYFQQTG<br>VRGFARSMPT SGALDRVASA TKIALYETPT GWKFFGNLMD ASKLSLCGEE |

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SFGTGSDHIR EKDGLWAVLA WLSILATRKQ SVEDILKDHV QKYGRNFFTR  
 YDYEEVEAEG ANKMMKDLEA LMFDRSFVGK QFSANDKVYT VEKADNFEYS  
 DPVDGSISRN QGLRLIFTDG SRIVFRLSGT GSAGATIRLY IDSYEKDVAK  
 INQDPQVMLA PLISIALKVS QLQERTGRTA PTVIT

**Purity** >95% by SDS - PAGE

**Storage** Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

**Concentration** 1mg/ml (determined by Absorbance at 280nm)

## GENE INFORMATION

**Gene Name** PGM1 phosphoglucomutase 1 [ Homo sapiens ]

**Official Symbol** PGM1

**Synonyms** PGM1; phosphoglucomutase 1; phosphoglucomutase-1; PGM 1; glucose phosphomutase 1; GSD14;

**Gene ID** 5236

**mRNA Refseq** NM\_001172818

**Protein Refseq** NP\_001166289

**MIM** 171900

**UniProt ID** P36871

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|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chromosome Location</b> | 1p22.1                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Pathway</b>             | Amino sugar and nucleotide sugar metabolism, organism-specific biosystem; Amino sugar and nucleotide sugar metabolism, conserved biosystem; GDP-glucose biosynthesis, organism-specific biosystem; GDP-glucose biosynthesis, conserved biosystem; Galactose metabolism, organism-specific biosystem; Galactose metabolism, conserved biosystem; Glucose metabolism, organism-specific biosystem; |
| <b>Function</b>            | isomerase activity; magnesium ion binding; phosphoglucomutase activity;                                                                                                                                                                                                                                                                                                                          |

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