

Phosphogluconate dehydrogenase, human recombinant
6PGD, PGD
Catalog # PBV11531r**Specification**

Phosphogluconate dehydrogenase, human recombinant - Product info

Primary Accession [P52209](#)
Calculated MW **53.3 kDa KDa**

Phosphogluconate dehydrogenase, human recombinant - Additional Info

Gene ID **5226**
Other Names
6PGD, PGD

Gene Source **Human**
Source **E. coli**
Assay&Purity **SDS-PAGE;> 90%**
Recombinant **Yes**
Sequence **MGSSHHHHHH SSGLVPRGSH MAQADIALIG
LAVMGQNLIL NMNDHGFVVC AFNRTVSKVD
DFLANEAKGT KVVGAQSLKE MVSKLKKPRR
IILLVKAGQA VDDFIEKLVP LLDTGDIID
GGNSEYRDTT RRCRDLKAKG ILFVGSGVSG
GEEGARYGPS LMPGGNKEAW PHIKTIFQGI
AAKVGTEGPC CDWVGDEGAG HFVKMVHNGI
EYGDMQLICE AYHLMKDVLG MAQDEMAQAF
EDWNKTELDS FLIEITANIL KFQDTDGKHL
LPKIRDSAGQ KGTGKWTAS ALEYGVPVTL
IGEAVFARCL SSLKDERIQA SKKLKGPQKF
QFDGDKKSFL EDIRKALYAS KIISYAQGFM
LLRQAATEFG WTLNYGGIAL MWRGGCIIRS
VFLGKIKDAF DRNPELQNL LDDFFKSAVE
NCQDSWRRRAV STGVQAGIPM PCFTTALSFY
DGYRHEMLPA SLIQAQRDYF GAHTYELLAK
PGQFIHTNWT GHGGTVSSSS YNA**

Target/Specificity
PGD

Format
Liquid

Storage
-20°C;In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 0.1M NaCl, 10% glycerol

Phosphogluconate dehydrogenase, human recombinant - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phosphogluconate dehydrogenase, human recombinant - Images

Phosphogluconate dehydrogenase, human recombinant - Background

PGD (Phosphogluconate dehydrogenase), also known as 6PGD, is a 483 amino acid enzyme that is involved in the pentose phosphate shunt. Pentose is required for nucleic acid biosynthesis and the pentose phosphate cycle is a major source of NADPH. PGD deficiency increases the level of erythrocyte pyruvate kinase (PK) activity and reduces glutathione synthetase (GSH), resulting in hemolysis. Defects in PGD are generally asymptomatic and are inherited in an autosomal dominant fashion. Recombinant human PGD protein, fused to His tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques