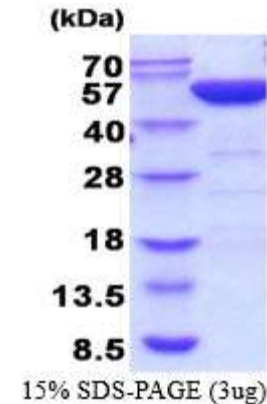


Phosphogluconate dehydrogenase, human recombinant

CATALOG NO:	P1051-10	10 µg
	P1051-50	50 µg
ALTERNATE NAMES:	6PGD, PGD	
CONCENTRATION:	1 mg/ml (determined by Bradford assay)	
SOURCE:	<i>E.coli</i> expressed recombinant PGD protein, fused to His-tag at N-terminus (1-483aa).	
PURITY:	> 90% by SDS-PAGE	
MOL. WEIGHT:	This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 55.3 kDa (503aa).	
FORM:	Liquid	
FORMULATION:	In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 0.1M NaCl, 10% glycerol	
STORAGE CONDITIONS:	Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.	
SEQUENCE:	<p>MGSSHHHHHH SGLVPRGSH MAQADIALIG LAVMGQNLIL NMNDHGFVVC AFNRTVSKVD DFLANEAKGT KVVGAQSLKE MVSKLKKPRR IILLVKAGQA VDDFIEKLVP LLDTGDIID GGNSEYRDTT RRCRDLKAKG ILFVGSGVSG GEEGARYGPS LMPGGNKEAW PHIKTIFQGI AAKVGTGEP C DWVVGDEGAG HFVKMVHNGI EYGDMQLICE AYHLMKDVLG MAQDEMAQAF EDWNKTELDS FLIEITANIL KFQDTDGKHL LPKIRDSAGQ KGTGKWT AIS ALEYGVPVTL IGEAVFARCL SSLKDERIQA SKKLKGPQKF QFDGDKKSFL EDIRKALYAS KIISYAQGFM LLRQAATEFG WTLNYGGIAL MWRGGCIIRS VFLGKIKDAF DRNPELQNL LDDFFKSAVE NCQDSWRRAV STGVQAGIPM PCFTTALSFY DGYRHEMLPA SLIQAQRDYF GAHTYELLAK PGQFIHTNWT GHGGTVSSSS YNA</p>	
DESCRIPTION:	<p>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 <i>E.coli</i> and purified by using conventional chromatography techniques.</p>	

BIOLOGICAL ACTIVITY: Specific activity is >10 units/mg, in which one unit oxidize 1.0 umole of 6-phospho-D-gluconate to D-ribulose 5-phosphate per minute at pH 8.0 at 25C, in the presence of β-NADP.



Human recombinant Phosphogluconate dehydrogenase

RELATED PRODUCT:

- E. Coli Recombinant Thioredoxin 1 (Cat. No. 6329-50)
- E. Coli Recombinant TRXB (Cat. No. 6331-100)
- Human Recombinant PRDX 1 (Cat. No. 6323-100)
- Human Recombinant PRDX 2 (Cat. No. 6319-100)
- Human Recombinant PRDX 3 (Cat. No. 6320-100)
- Human Recombinant PRDX 4 (Cat. No. 6324-100)
- Human Recombinant PRDX 5 (Cat. No. 6321-100)
- Human Recombinant PRDX 6 (Cat. No. 6322-100)
- Human Recombinant Thioredoxin (Cat. No. 6305-100)
- Human Recombinant Thioredoxin 2 (Cat. No. 6318-100)
- Human Recombinant TXNRD1 (Cat. No. 6330-100)
- Thioredoxin isoform 1 (Trx), Active, Human Recombinant (Cat. No. P1039-100)

FOR RESEARCH USE ONLY! Not to be used on humans.