

AR50357PU-S

Human G6PD (1-515, His-tag) - Purified

Alternate names:

Glucose-6-P-Dehydrogenase, Glucose-6-phosphate 1-dehydrogenase

Quantity:

0.1 mg

Concentration:

0.5mg/ml (determined by Bradford assay)

Background:

Glucose-6-phosphate dehydrogenase (G6PD) is the rate-limiting enzyme of the pentose phosphate pathway, a metabolic pathway that supplies reducing energy to cells by maintaining the level of NADPH. G6PD converts glucose-6-phosphate into 6-phosphoglucono-delta-lactone and simultaneously produce NADPH. The NADPH in turn maintains the level of glutathione in these cells that helps protect the red blood cells against oxidative damage. G6PD deficiency cause acute hemolytic anemia.

Uniprot ID:

[P11413](#)

NCBI:

[NP_001035810.1](#)

GeneID:

[2539](#)

Species:

Human

Format:

State: Liquid purified protein

Purity: >95% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 0.1mM PMSF, 2mM EDTA, 2mM DTT, 200mM NaCl

Description:

Recombinant human G6PD protein, fused to His-tag at N-terminus, was expressed in Hi-5 cell using baculovirus expression system and purified by using conventional chromatography.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MAEQVALSRT QVCGILREEL FQGDAFHQSD THIFIIMGAS
GDLAKKKIYP TIWWLFRDGL LPENTFIVGY ARSRLTVADI RKQSEPFKA TPEEKLKLED
FFARNSYVAG QYDDAASYQR LNSHMNALHL GSQANRLFYL ALPPTVYEAV TKNIHESCMS
QIGWNRIVE KPFGRDLQSS DRLSNHISL FREDQIYRID HYLKGEMVQN LMVLRANRI
FGPIWNRDNI ACVILTFKEP FGTEGRGGYF DEFGIIRDVM QNHLLQMLCL VAMEKPASTN
SDDVRDEKVK VLKCISEVQA NNVVLGQYVG NPDGEGEATK GYLDDPTVPR GSTTATFAAV
VLYVENERWD GVPFILRCGK ALNERKAEVR LQFHDVAGDI FHQQCKRNL VIRVQPNEAV
YTKMMTKKPG MFFNPEESEL DLTYGNYKN VKLPDAYERL ILDVFCGSQM HFVRSDELRE
AWRIFTPLLH QIELEKPKPI PYIYSGRGPT EADELMKRVG FQYEGTYKWV NPHKL

Molecular weight: 61.4 kDa (535aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Huang Y., et al. (2008) Mol Genet Metab. 93(1):44-53. Zimny A., et al. (2003) Pol Arch Med Wewn. 110(5):1327-33

Pictures:

