

## Product datasheet for PH320625

### Glucose 6 Phosphate Dehydrogenase (G6PD) (NM\_000402) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	G6PD MS Standard C13 and N15-labeled recombinant protein (NP_000393)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC220625
Predicted MW:	62.3 kDa
Protein Sequence:	>RC220625 representing NM_000402 Red=Cloning site Green=Tags(s)

MGRRGSAPGNRTRLRGCEGRGRRRRSADSVMAEQVALSRTQVCGILREELFQGDAFHQSDTHIFIIMGAS  
GDLAKKKIYPTIWWLFRDGLLPENTFIVGYARSRLTVADIRKQSEPFKATPEEKLKLEDFFARNSYVAG  
QYDDAASYQRLNSHMNALHLGSQANRLFYLALPPTVYEAVTKNIHESCMSQIGWNRIIVEKPFGRDLQSS  
DRLSNHISSLFREDQIYRIDHYLGKEMVQNLMLVLRFANRIFGPIWNRDNIACVILTFKEPFGTEGRGGYF  
DEFGIIRDVMQNHLQLMLCLVAMEKPASTNSDDVRDEKVKVLKCISEVQANNVVLGQYVGNPDGEGEATK  
GYLDDPTVPRGSTTATFAAVVLVYENERWDGVPFILRCGKALNERKAEVRLQFHDVAGDIFHQCKRNEL  
VIRVQPNEAVYTKMMTKKPGMFFNPEESELDTYGNRYKNVKLPDAYERLILDVFCGSQMHFVRSDELRE  
AWRIFTPLLLHQIELEKPKPIPIYIYGSRGPTAEDELMKRVGFQYEGTYKVVNPHKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_000393</a></u>
RefSeq Size:	2395
RefSeq ORF:	1635



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Synonyms: G6PD1

Locus ID: 2539

UniProt ID: [P11413](#)

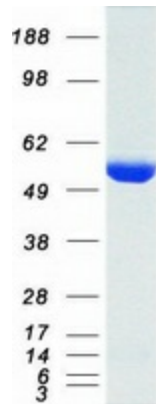
Cytogenetics: Xq28

**Summary:** This gene encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Glutathione metabolism, Metabolic pathways, Pentose phosphate pathway

### Product images:



Coomassie blue staining of purified G6PD protein (Cat# [TP320625]). The protein was produced from HEK293T cells transfected with G6PD cDNA clone (Cat# [RC220625]) using MegaTran 2.0 (Cat# [TT210002]).