

Glucose-6-Phosphate Dehydrogenase

Catalogue No. GLPD-70-1201 and 70-1201-01

ORIGIN

Leuconostoc mesenteroides

SPECIFICATIONS

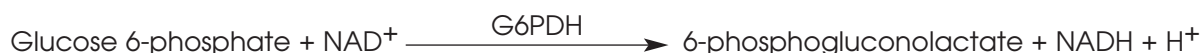
Appearance	White/off white free-flowing powder
Solution quality	Clear, colourless solution, essentially free from particulate matter (10mg/mL in demineralised water)
Activity	>200.0 U/mg powder at 25°C
Specific activity	>300.0 U/mg protein at 25°C
Contaminants:	
o Creatine Kinase (including AK)	<0.002%
o Adenylate Kinase	<0.002%
o Hexokinase	<0.05%
o ATPase	<0.002%
o 6-Phosphogluconate Dehydrogenase	<0.002%
o Phosphoglucomutase	<0.002%
o Phosphoglucose Isomerase	<0.002%
o Glutathione Reductase	<0.002%

CHARACTERISTICS

Optimum pH	7.4 to 8.0 in 0.1M Tris-HCl buffer
Temperature:	
Relative activity of glucose-6-phosphate dehydrogenase at commonly used assay temperatures	
o 25°C	1.0
o 30°C	1.25
o 37°C	1.6
Lyophilised stability	24 months from date of manufacture at -20°C

ASSAY PRINCIPLE

Glucose-6-phosphate dehydrogenase (G6PDH) catalyses the oxidation of glucose-6-phosphate to 6-phosphogluconolactone.



The production of NADH in the reaction may be detected by direct measurement of the increase in absorbance observed at 340nm.

