

## Recombinant G6PD/Glucose-6-phosphate 1-dehydrogenase(C-His)

Catalog No: C826

<b>Description</b>	Recombinant Human Glucose-6-Phosphate 1-Dehydrogenase is produced by Human cells system and the target gene encoding Ala2-Leu515 is expressed with a 6His tag at the C-terminus.
<b>Expression System</b>	Human cells
<b>Alternative name</b>	Glucose-6-Phosphate 1-Dehydrogenase; G6PD
<b>Accession No.</b>	P11413
<b>Predicted Molecular Weight</b>	60.2kDa
<b>Apparent Molecular Weight</b>	40-60kDa, reducing conditions.
<b>Quality Control</b>	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>Formulation</b>	Supplied as a 0.2 μm filtered solution of PBS, pH7.4.
<b>Shipping</b>	The product is shipped on dry ice pack. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
<b>Background</b>	Glucose-6-Phosphate 1-Dehydrogenase (G6PD) is a cytosolic enzyme that belongs to the glucose-6-phosphate dehydrogenase family. G6PD participates in the pentose phosphate pathway that supplies reducing energy to cells by maintaining the level of the co-enzyme nicotinamide adenine dinucleotide phosphate (NADPH). G6PD produces pentose sugars for nucleic acid synthesis and main producer of NADPH reducing power. NADPH in turn maintains the level of glutathione in these cells that helps protect the red blood cells against oxidative damage. It is notable in humans that G6PD is remarkable for its genetic diversity. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia.

