



Recombinant Protein Technical Manual

Recombinant Human G6PD Protein (His Tag)

RPE5007

Product Data:

Product SKU: RPE5007

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P11413

Protein Information:

Molecular Mass: 60.2 kDa

AP Molecular Mass: 56 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Glucose-6-Phosphate 1-Dehydrogenase; G6PD

Immunogen Information:

Sequence: Ala2-Leu515

Background:

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.