

Recombinant Human G6PD Protein (His Tag)

Catalog Number: PKSH032492

Note: Centrifuge before opening to ensure complete recovery of vial contents.

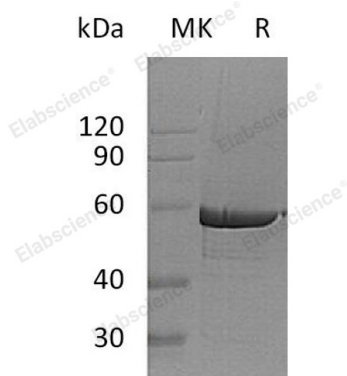
Description

Species	Human
Mol_Mass	60.2 kDa
Accession	P11413
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein 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 20mM Citrate, 15% Trehalose, 150mM NaCl, 0.05% Tween 80, pH5.5.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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.

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