

Recombinant Human Glucose-6-phosphate 1-dehydrogenase/G6PD Protein

Catalog No.: RP02937LQ Recombinant

Sequence Information

Species **Gene ID** **Swiss Prot**
 HEK293 cells 2539 P11413

Tags
 C-His

Synonyms
 G6PD; G6PD1; glucose-6-phosphate dehydrogenase;G6PD1

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.

Product Information

Source **Purification**
 HEK293 cells $\geq 95\%$ as determined by SDS-PAGE.

Endotoxin
 < 1 EU/ μ g of the protein by LAL method.

Formulation
 Supplied as a 0.22 μ m filtered solution in 20mM Citrate, 15% Trehalose, 150mM NaCl, 0.05% Tween 80, pH5.5.

Reconstitution

Basic Information

Description

Recombinant Human Glucose-6-phosphate 1-dehydrogenase/G6PD Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala2-Leu515) of human Glucose-6-phosphate 1-dehydrogenase/G6PD (Accession #NP_001035810.1) fused with 6 \times His tag at the C-terminus.

Bio-Activity

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

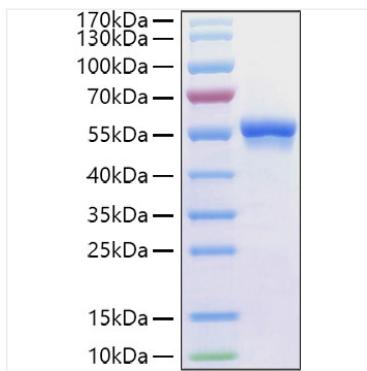
Store at -70°C. This product is stable at $\leq -70^{\circ}\text{C}$ for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

Contact



www.abclonal.com

Validation Data



Recombinant Human Glucose-6-phosphate 1-dehydrogenase/G6PD Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.