

# Recombinant Human G6PD Protein (His Tag)

Catalog Number:PKSH032492



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

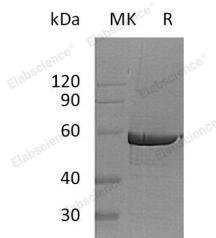
## Description

<b>Synonyms</b>	Glucose-6-Phosphate 1-Dehydrogenase;G6PD
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Ala2-Leu515
<b>Accession</b>	P11413
<b>Calculated Molecular Weight</b>	60.2 kDa
<b>Observed molecular weight</b>	55-62 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of 20mM Citrate, 15% Trehalose, 150mM NaCl, 0.05% Tween 80, pH5.5.
<b>Reconstitution</b>	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.

## For Research Use Only

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