Active Recombinant Human G6PD Protein, His-tagged

Cat. No. G6PD-12H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human G6PD Protein (Ala2-Leu515) with C-terminal 6x His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-515
Description	This gene encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia. Two transcript variants encoding different isoforms have been found for this gene.
Bio-activity	Measured by its ability to dehydrogenate glucose-6-phosphate. The specific activity is > 14,000 pmol/min/μg, as measured under the described conditions.
Molecular Mass	60 kDa
Endotoxin	< 1.0 EU/μg of the protein by the LAL method.

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Purity	> 95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70 centigrade as supplied. 3 months, -20 to -70 centigrade under sterile conditions after opening.
Storage Buffer	Supplied as a 0.2 µm filtered solution in Tris, NADP and Glycerol.
Shipping	The product is shipped with polar packs.

GENE INFORMATION

Gene Name	G6PD glucose-6-phosphate dehydrogenase [Homo sapiens (human)]
Official Symbol	G6PD
Synonyms	G6PD; glucose-6-phosphate dehydrogenase; G6PD1; glucose-6-phosphate 1-dehydrogenase; epididymis secretory sperm binding protein; EC 1.1.1.49
Gene ID	2539
mRNA Refseq	NM_000402
Protein Refseq	NP_000393
MIM	305900
UniProt ID	P11413

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