



# Human G6PD peptide (DAG-P1549)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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. [provided by RefSeq, Jul 2008]
<b>Specificity</b>	Isoform Long is found in lymphoblasts, granulocytes and sperm.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the glucose-6-phosphate dehydrogenase family.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">G6PD glucose-6-phosphate dehydrogenase [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	G6PD
<b>Synonyms</b>	G6PD; glucose-6-phosphate dehydrogenase; G6PD1; glucose-6-phosphate 1-dehydrogenase;

<b>Entrez Gene ID</b>	<a href="#">2539</a>
<b>mRNA Refseq</b>	<a href="#">NM_000402.4</a>
<b>Protein Refseq</b>	<a href="#">NP_000393.4</a>
<b>UniProt ID</b>	P11413
<b>Chromosome Location</b>	Xq28
<b>Pathway</b>	Carbon metabolism, organism-specific biosystem; Carbon metabolism, conserved biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of carbohydrates, organism-specific biosystem; Pentose Phosphate Pathway, organism-specific biosystem; Pentose phosphate pathway, organism-specific biosystem; Pentose phosphate pathway, conserved biosystem; Pe
<b>Function</b>	NADP binding; glucose binding; glucose binding; glucose-6-phosphate dehydrogenase activity; glucose-6-phosphate dehydrogenase activity; protein binding; protein homodimerization activity;