



# Native Glucose-6-Phosphate Dehydrogenase (DAG-WT1282)

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

## PRODUCT INFORMATION

<b>Product Overview</b>	One unit of activity is defined as the amount of enzyme that will catalyse the reduction of 1.0 micromole of NAD <sup>+</sup> per minute at 25°C under the standard assay method conditions.
<b>Conjugate</b>	N/A
<b>Applications</b>	Enzymatic determination
<b>Format</b>	Lyophilized
<b>Size</b>	1 KU
<b>Buffer</b>	Enzyme dilution buffer
<b>Storage</b>	Store at -20°C

## BACKGROUND

<b>Introduction</b>	Glucose-6-phosphate dehydrogenase(G6PD or G6PDH) is a cytosolic enzyme in the pentose phosphate pathway (see image), a metabolic pathway that supplies reducing energy to cells (such as erythrocytes) by maintaining the level of the co-enzyme nicotinamide adenine dinucleotide phosphate (NADPH). The NADPH in turn maintains the level of glutathione in these cells that helps protect the red blood cells against oxidative damage. Of greater quantitative importance is the production of NADPH for tissues actively engaged in biosynthesis of fatty acids and/or isoprenoids, such as the liver, mammary glands, adipose tissue, and the adrenal glands.
<b>Keywords</b>	Glucose-6-Phosphate Dehydrogenase; G6PD