

Glucose-6-phosphate (G6P) Colorimetric Assay Kit

Cat No: HR3BC1276

For research use only

Overview

Detection Method	Colorimetric method
Storage	-20?
Instrument	Microplate reader (450 nm)
Assay Time	35 min
Validity	6
Assay Type	Quantitative
Sample Type	Serum, plasma, animal tissue
Synonyms	G6P
Instrument	Microplate reader (450 nm)
Detection Principle	<p>Glucose-6-phosphate (G6P) is a molecule generated by phosphorylation of hydroxyl groups on the sixth carbon of glucose under the catalysis of hexokinase. It is a common small molecule of sugar metabolism in cells and participates in biochemical pathways such as glycolysis and pentose phosphate pathway. In the first reaction of glycolysis, glucose is catalyzed by hexokinase to produce glucose-6-phosphate, which is then catalyzed by phosphoglucose isomerase to form fructose-6-phosphate to continue the other steps of glycolysis: In the pentose phosphate pathway, glucose-6-phosphate is the first substrate, and this process is also the main way to generate NADPH. In addition to these two metabolic pathways, glucose-6-phosphate can also be converted into glycogen or starch and stored.</p>
Reagents	
Labware	Pipettor, Water bath, Centrifuge
Size	96T
Sensitivity	5.6 ?mol /L
Detection Range	5.6-500 ?mol/L
Recovery Rate	95