Creative Enzymes®

Native baker's yeast (S. cerevisiae) Glucose-6-phosphate Dehydrogenase

Cat. No. DIA-219

Lot. No. (See product label)

Introduction

Description Glucose-6-phosphate dehydrogenase (G6PD or G6PDH) (EC 1.1.1.49) is a cytosolic enzyme that catalyzes the chemical reaction:D-glucose 6-phosphate + NADP+ ↔ 6-phospho-D-glucono-1,5-lactone + NADPH + H+. This enzyme is in the pentose phosphate pathway, 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).

Applications Glucose-6-phosphate dehydrogenase is used to test ketose reductase activity in developing maize endosperm.

Synonyms Glucose-6-phosphate dehydrogenase; G6PD; G6PDH; Glucose-6-phosphate dehydrogenase (NADP(+)); EC 1.1.1.49; Glucose-6-phosphate 1-dehydrogenase; Glucose-6-phosphate dehydrogenase; GPD

Product Information

Source Baker's yeast (S. cerevisiae)

Form lyophilized powder

EC Number EC 1.1.1.49

CAS No. 9001-40-5

Unit Definition One unit will oxidize 1.0 μmole of D-glucose 6-phosphate to 6-phospho-D-gluconate per min in the presence of NADP at pH 7.4 at 25 °C.

Storage and Shipping Information

Storage −20°C