Creative Enzymes®

Glucose Dehydrogenase, Recombinant

Cat. No. NATE-1139

Lot. No. (See product label)

Introduction

Description	In enzymology, a glucose 1-dehydrogenase (EC 1.1.1.47) is an enzyme that catalyzes the chemical reaction:beta-D-glucose + NAD (P)+↔ D-glucono-1,5-lactone + NAD (P)H + H+. The 3 substrates of this enzyme are beta-D-glucose, NAD+, and NADP+, whereas its 4 products are D-glucono-1,5-lactone, NADH, NADPH, and H+. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with NAD+ or NADP+ as acceptor.
Applications	GDH can be used as the raw material enzyme in clinic diagnostic of blood glucose.
Synonyms	EC 1.1.1.47; D-glucose dehydrogenase (NAD (P)+); hexose phosphate dehydrogenase; β-D-glucose:NAD (P)+ 1-oxidoreductase; glucose 1-dehydrogenase; Glucose dehydrogenase; 9028-53-9

Product Information

Appearance	White powder, lyophilized
EC Number	EC 1.1.1.47
CAS No.	9028-53-9
Molecular Weight	About 28kDa (SDS-PAGE detection)
Purity	90% (SDS-PAGE test)
Activity	About 200U/mg
Buffer	50mM phosphate buffer, pH7.0
Unit Definition	1 unit will catalyze 1umol β-D-glucose oxidizing into D-glucose-δ-lactone per minute at pH 8.0, 37 °C.

Storage and Shipping Information

Storage	4°C, store at -20°C for long-term preservation.