Creative Enzymes®

Native Pseudomonas sp. Glucose dehydrogenase

Cat. No. NATE-0305

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.
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

Source	Pseudomonas sp.
Form	powder; white
EC Number	EC 1.1.1.47
CAS No.	9028-53-9
Activity	> 200 units/mg
Unit Definition	One unit corresponds to the amount of enzyme which will oxidizes 1 μmole β-D-glucose to D-glucono-δ-lactone per minute at pH 8.0 and 37°C

Storage and Shipping Information

Storage	−20°C