

Glucose Dehydrogenase, Recombinant

Product Information

Cat#	NATE-1139
Abbr	GDH, Recombinant
Similar	Glucose dehydrogenase
Description	In enzymology, a glucose 1-dehydrogenase (EC 1.1.1.47) is an enzyme that catalyzes the chemical reaction: $\beta\text{-D-glucose} + \text{NAD (P)}^+ \leftrightarrow \text{D-glucono-1,5-lactone} + \text{NAD (P)H} + \text{H}^+$. The 3 substrates of this enzyme are $\beta\text{-D-glucose}$, 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.
Appearance	White powder, lyophilized
Form	Freeze dried powder
Enzyme Commission Number	EC 1.1.1.47
Activity	About 200U/mg
CAS No.	9028-53-9
Molecular Weight	About 28kDa (SDS-PAGE detection)
Purity	90% (SDS-PAGE test)
Unit Definition	1 unit will catalyze 1umol $\beta\text{-D-glucose}$ oxidizing into D-glucose- δ -lactone per minute at pH 8.0, 37 °C.
Storage	4°C, store at -20°C for long-term preservation.
Buffer	50mM phosphate buffer, pH7.0
Synonyms	EC 1.1.1.47; D-glucose dehydrogenase (NAD (P)^+); hexose phosphate dehydrogenase; $\beta\text{-D-glucose:NAD (P)}^+$ 1-oxidoreductase; glucose 1-dehydrogenase;

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Glucose dehydrogenase; 9028-53-9
