

## Glucose Dehydrogenase, Recombinant

### Product Information

<b>Cat#</b>	NATE-1139
<b>Abbr</b>	GDH, Recombinant
<b>Similar</b>	Glucose dehydrogenase
<b>Description</b>	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 $\beta\text{-D-glucose}$ , $\text{NAD}^+$ , and $\text{NADP}^+$ , whereas its 4 products are D-glucono-1,5-lactone, NADH, NADPH, and $\text{H}^+$ . This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with $\text{NAD}^+$ or $\text{NADP}^+$ as acceptor.
<b>Applications</b>	GDH can be used as the raw material enzyme in clinic diagnostic of blood glucose.
<b>Appearance</b>	White powder, lyophilized
<b>Form</b>	Freeze dried powder
<b>Enzyme Commission Number</b>	EC 1.1.1.47
<b>Activity</b>	About 200U/mg
<b>CAS No.</b>	9028-53-9
<b>Molecular Weight</b>	About 28kDa (SDS-PAGE detection)
<b>Purity</b>	90% (SDS-PAGE test)
<b>Unit Definition</b>	1 unit will catalyze 1 $\mu\text{mol}$ $\beta\text{-D-glucose}$ oxidizing into D-glucose- $\delta$ -lactone per minute at pH 8.0, 37 °C.
<b>Storage</b>	4°C, store at -20°C for long-term preservation.
<b>Buffer</b>	50mM phosphate buffer, pH7.0
<b>Synonyms</b>	EC 1.1.1.47; D-glucose dehydrogenase (NAD (P) <sup>+</sup> ); hexose phosphate dehydrogenase; $\beta\text{-D-glucose:NAD (P)}^+$ 1-oxidoreductase; glucose 1-dehydrogenase;



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Glucose dehydrogenase; 9028-53-9

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