

## Glutamate Dehydrogenase from Thermophilic Bacterium, recombinant

Cat. No. NATE-1701

Lot. No. (See product label)

## Introduction

**Description** GDH is an oxidoreductase enzyme which relates carbon and nitrogen metabolism.

It catalyzes the reduction of  $\alpha$ -ketoglutarate and ammonia to L-glutamate and vice versa. This enzyme is a robust and ideal candidate for research use, and industrial

applications in the diagnostics and food industries.

**Synonyms** glutamate dehydrogenase; glutamic dehydrogenase; glutamate dehydrogenase

(NAD+); glutamate oxidoreductase; glutamic acid dehydrogenase; L-glutamate dehydrogenase; NAD+-dependent glutamate dehydrogenase; NAD+-dependent glutamic dehydrogenase; NAD+-glutamate dehydrogenase; NAD+-linked

glutamate dehydrogenase; NAD+-linked glutamic dehydrogenase; NAD+-specific

glutamic dehydrogenase; NAD+-specific glutamate dehydrogenase;

NAD+: glutamate oxidoreductase; NADH-linked glutamate dehydrogenase; GLDH;

EC 1.4.1.2

## **Product Information**

**Species** Thermophilic Bacterium

**Source** E. coli

**Form** Lyophilized powder

**EC Number** EC 1.4.1.2

*CAS No.* 9001-46-1

Molecular Weight 270 kDa; Homohexameric ( 45 kDa per subunit)

**Activity** > 90 U/mg protein

**Concentration** Protein concentration: > 13% (w/w)

*pH Stability* 7-8.5

Optimum pH 8

**Thermal stability** 20-70°C, Maintains over 85% of its activity for 8 hours at 50°C.

**Optimum temperature** 50°C

**Unit Definition** One unit is defined as the conversion of 1umol of  $\alpha$ -ketoglutarate into glutamate, in

1 minute at 50°C at pH 8.0

## Storage and Shipping Information

Storage at -20 °C

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