

Glutamate dehydrogenase (NAD dependent) from Microorganism

Product Code: 183636

EC: 1.4.1.2

SKU: 183636

Category: [Enzymes](#)

PRODUCT DESCRIPTION

SPECIFICATIONS

EC 1.4.1.2

Product name L-Glutamate:NAD⁺ oxidoreductase (deaminating)

Appearance White amorphous powder lyophilized

Activity Grade II, 100 U/mg-solid or more

Contaminants NAD oxidase $\leq 1.0 \times 10^{-2}$ %

Stability Stable at $\pm 20^{\circ}\text{C}$ for at least 12 months

Molecular weight approx. 260,000

Isoelectric point 5.6

Michaelis constants 9.21×10^{-3} M (NH₃), 4.80×10^{-3} M (α -Ketoglutarate), 5.89×10^{-4} M (NAD⁺), 7.8×10^{-5} M (L-Glutamate), 1.29×10^{-4} M (NADH)

Structure 6 subunits per mol of enzyme

Inhibitors Heavy metals, PCMB, IAA

Optimum pH 7.5 - 8.0 (α -KG $\rightarrow$ L-Glu), 9.0 (L-Glu $\rightarrow$ α -KG)

Optimum temperature 55°C (α -KG $\rightarrow$ L-Glu), 50°C (L-Glu $\rightarrow\alpha$ -KG)

pH stability 5.0 - 10.0 (25°C, 20hr)

Thermal stability below 50°C (pH 8.3, 10min)