Leucine Dehydrogenase from Bacillus sp.
Product Code: 182650
EC no: 1.4.1.9

SKU: 182650
Category: Enzymes

PRODUCT DESCRIPTION

SPECIFICATIONS:

EC 1.4.1.9

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

Appearance: White amorphous powder, lyophilized

Activity: Grade II, 20 U/mg-solid or more (contains approx. 70% of stabilizers)

Contaminants: Leucylpeptide decomposing enzymes:
(Leu-Val): ≤ 1.0×10-2%, (Leu-Gly-Gly): ≤ 1.0×10-2%
NADH oxidase: ≤ 1.0×10-2%

Stabilizers: 2-Mercaptoethanol, L-cysteine, dithiothreitol, ethylenediaminetetraacetate

Stability: Stable at -20 °C for at least 12 months

Molecular weight: 245,000

Michaelis constants: 1.0×10-3M (L-Leucine), 3.9×10-4M (NAD□), 3.5×10-5M (NADH), 3.1×10-4M□α-Ketoisocaproate (α-KIC),
2.0×10-1M (NH3)

Structure: 6 subunits per mol of enzyme

Inhibitors: Na2S, Hg2+, Cu2+, Co2+, Mg2+, p-chloromercuribenzoate

Optimum pH: 10.5 - 10.8 (L-Leu→α-KIC), 9.4 (α-KIC→L-Leu)

Optimum temperature: above 70℃

pH Stability: pH 5.5−10.5 (25℃, 20hr)

Thermal stability: Below 60 ℃ (pH 6.9, 10min)