

## L-Lactate dehydrogenase, Microorganism

Cat. No.:	HY-P2807
CAS No.:	9001-60-9
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### L-Lactate dehydrogenase

#### SOLVENT & SOLUBILITY

In Vitro	H <sub>2</sub> O : ≥ 100 mg/mL * "≥" means soluble, but saturation unknown.
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#### BIOLOGICAL ACTIVITY

Description	L-Lactate dehydrogenase, Microorganism (LAD) is a redox enzyme. L-Lactate dehydrogenase catalyzes the reduction of pyruvate to L-lactate by NADH in vivo with absolute enantiospecificity <sup>[1]</sup> .
In Vitro	<p>Reaction conditions</p> <p>Molecular weight:38 kDa (SDS-PAGE)</p> <p>Isoelectric point:6.2</p> <p>Optimum pH:6.5</p> <p>Optimum temperature:45 °C</p> <p>pH Stability:4.5-10.0 (37 °C/1h)</p> <p>Thermal stability:&lt;50 °C (pH7.4,15min)</p> <p>Inhibitors:Co<sup>2+</sup> Cu<sup>2+</sup> Fe<sup>3+</sup> Ni<sup>2+</sup> Zn<sup>2+</sup> NEM SDS Proclin</p> <p>Protocol</p> <p>The enzyme dissolved in water</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

#### REFERENCES

- [1]. Simon ES, et al. D-lactate dehydrogenase. Substrate specificity and use as a catalyst in the synthesis of homochiral 2-hydroxy acids. Appl Biochem Biotechnol. 1989 Nov;22(2):169-79.
- [2]. Holmberg N, et al. Redesign of the coenzyme specificity in L-lactate dehydrogenase from bacillus stearothermophilus using site-directed mutagenesis and media engineering. Protein Eng. 1999 Oct;12(10):851-6.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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