

L-Lactic Dehydrogenase

Cat: L8080

Specification: 2.5KU /10KU

Storage: Store at 2-8°C, and it is valid for 1 year.

Product Information

CAS: 9001-60-9

English name: L-Lactic Dehydrogenase

Alias: (S)-Lactate: NAD⁺ oxidoreductase; L-LDH; LAD; LD

Appearance (Character): Ammonium Sulfate Suspension

Isoelectric Point: 8.4-8.6

Optimal pH: 7.5

Molecular Weight: 140kDa (composed of four subunits)

Purity: ≥10mg protein/ml

Enzyme Activity/Potency: ≥300U/mg

Source: Rabbit Muscle

Introduction

The total molecular weight of lactate dehydrogenase (LDH) is 140kDa, consisting of four subunits, called M subunit muscle and H subunit heart. These subunits can be mixed in any of the five combinations M₄, M₃H₁, M₂H₂, MH₃, and H₄. Skeletal muscle contains LDH, which is mainly M₄, with a small amount of M₃H and trace amounts of H₂H₂. The molecular weights of H and M subunits are very similar, but the amino acid composition is very different. Rabbit muscle LDH can dissociate into a dimer substance MW≈~70kDa in acetate-chloride at pH5.0, and this dissociation is reversible.

Lactate dehydrogenase is responsible for converting pyruvate to lactate in fermentative metabolism, and it can also catalyze the oxidation of other L-2-hydroxy monocarboxylic acids.

L-lactate dehydrogenase from rabbit muscle has been used for: protein binding measurements; detecting the action of oxaloacetate decarboxylase; determining L- and D-lactate in serum.

Unit definition:

At pH7.5 and 37°C, one unit can reduce 1.0μmole of pyruvic acid to L-lactic acid per minute.

Reference:

[1] Bergmeyer, H.U. and Bernt, E. (1974) in Methods of Enzymatic Analysis, (Bergmeyer, H.U. ed.) Volume 2, 574-578, Academic Press, New York, NY

Note

1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.

2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.