



## D-LACTATE DEHYDROGENASE from *L. mesenteroides* (Lot 100503d)

### Recombinant

#### E-DLDHLM

11/13

(EC 1.1.1.28) (R)-lactate:NAD<sup>+</sup> oxidoreductase

### PROPERTIES

#### 1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 36,455)
- Single major band on isoelectric focusing (pI ~ 4.8)

#### 2. SPECIFIC ACTIVITY:

**2085 U/mg protein at pH 7.0 and 25°C.**

**One Unit** of D-lactate dehydrogenase is defined as the amount of enzyme required to produce one  $\mu$ mole of NAD<sup>+</sup> from NADH per minute under the following assay conditions:

Sodium phosphate buffer, pH 7.0	92 mM
Pyruvic acid	0.77 mM
NADH	0.2 mM

#### 3. OTHER ACTIVITIES (as a percentage of D-lactate dehydrogenase activity):

Enzyme Measured	Substrate	Activity, %
D-Lactate dehydrogenase	pyruvic acid	100
D-Glutamic-pyruvic transaminase	D-alanine	< 0.0001
L-Glutamic oxaloacetic transaminase	L-aspartic acid	< 0.0001
L-Malate dehydrogenase	oxaloacetic acid	< 0.04
Myokinase	AMP	< 0.0001
NADH oxidase	NADH	< 0.0001
Pyruvate kinase	PEP	< 0.0001

#### 4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 7.0 and up to 37°C.

#### 5. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. **Swirl to mix the enzyme suspension immediately prior to use.**