



L-MALATE DEHYDROGENASE from *E. coli* (Lot 180504a)

Recombinant

E-LMDHEC

(EC 1.1.1.37) malate dehydrogenase; (S)-malate:NAD⁺ oxidoreductase
CAS: 9001-64-3

08/18

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 34,000)
- One major band on isoelectric focusing (pI ~ 6.5)

2. SPECIFIC ACTIVITY:

1500 U/mg protein (on oxaloacetic acid) at pH 7.5 and 25°C

One Unit of L-malate dehydrogenase is defined as the amount of enzyme required to produce one μ mole of NAD⁺ from NADH in the presence of oxaloacetic acid (0.47 mM) in sodium phosphate buffer (92 mM), pH 7.5 at 25°C.

3. SPECIFICITY:

Catalyses the reaction:



4. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Substrate	%
Oxaloacetic acid	100
L-aspartic acid	<0.0001
NADH	<0.006

Action on these substrates was determined in sodium phosphate buffer (92 mM), pH 7.5 at 25°C.

5. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 6.0-7.5 and up to 40°C

6. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension containing 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium phosphate buffer (92 mM), pH 7.5 containing 0.5 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**