FORMATE DEHYDROGENASE from *C. boidinii* (Lot 180710b)

Recombinant

E-FDHCB **02/19**

(EC 1.2.1.2 (transferred to EC 1.17.2.9)) formate dehydrogenase; formate:NAD+ oxidoreductase
CAS: 9028-85-7

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 41,000)
- One major band on isoelectric focusing (pI ~ 6.4)

2. SPECIFIC ACTIVITY:

2 U/mg protein (on formic acid) at pH 7.6 and 25°C

One Unit of formate dehydrogenase is defined as the amount of enzyme required to convert one µmole of formic acid to NADH + CO_2 per minute in the presence of NAD^+ in potassium phosphate buffer (41 mM), pH 7.6 at 25°C.

3. SPECIFICITY:

Catalyses the reaction:

Formate + NAD^+ = CO_2 + NADH

4. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Substrate	%
Formic acid	100
NADH	< 0.005

Action on all substrates was determined in potassium phosphate buffer (41 mM), pH 7.6 at 25°C.

5. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 7.6 and up to 37°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 potassium phosphate buffer (100 mM), pH 7.6 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**