



## CYTIDYLATE KINASE from a prokaryote (Lot 100101a)

### Recombinant

#### E-CMPK

02/19

(EC 2.7.4.25) (d)CMP kinase; ATP:CMP phosphotransferase; UMP-CMP kinase

### PROPERTIES

#### 1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 26,910)
- One major band on isoelectric focusing (pI ~ 6.2)

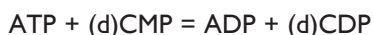
#### 2. SPECIFIC ACTIVITY:

**50 U/mg protein (on CMP) at pH 7.6 and 25°C**

**One Unit** of cytidylate kinase is defined as the amount of enzyme required to produce one  $\mu$ mole of CDP from CMP and ATP per minute, in the presence of NADH, in TEA buffer (73 mM), pH 7.6 at 25°C.

#### 3. SPECIFICITY:

Catalyses the following reaction:



#### 4. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Enzyme	Substrate	%
Cytidylate kinase	CMP	100
ATPase	ATP	~ 0.0019
Myokinase	AMP	< 0.0001
NADH oxidase	NADH	< 0.0001

#### 5. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 7.6 and up to 25°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 TEA buffer (100 mM), pH 7.6 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**