URIDYLATE KINASE from *a prokaryote* (Lot 190101a)

Recombinant

E-UMPK **03/19**

(EC 2.74.22) ATP:UMP phosphotransferase; UMP-kinase; uridine monophosphate kinase

CAS: 9036-23-1

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 26,000)
- One major band on isoelectric focusing (pI ~ 6.9)

2. SPECIFIC ACTIVITY:

24 U/mg protein at pH 7.6 and 25°C

One unit of uridylate kinase activity is defined as the amount of enzyme required to form 1 µmoles of UDP from UMP and ATP under the following assay conditions:

TEA buffer, pH 7.6	73 mM
PEP	0.78 mM
$MgCl_2$	7.3 mM
ATP	5.3 mM
UMP	0.5 mM
NADH	0.26 mM
Pyruvate kinase	4.4 U/mL
L-Lactate dehydrogenase	4.0 U/mL

3. OTHER ACTIVITIES (as a percentage of uridylate kinase activity):

Enzyme	Substrate	%
Uridylate kinase	UMP	100
Adenylate kinase	AMP	< 0.0017
ATPase	ATP	< 0.0021
NADH oxidase	NADH	< 0.0013

4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 7.6 and up to 25°C.

5. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. For assay, this enzyme should be diluted in 100 mM TEA buffer, pH 7.6 containing 1 mg/mL BSA. **Swirl to mix the enzyme suspension immediately prior to use.**