

Propionate kinase/TdcD Protein, E.coli (Myc, His)

Cat. No.:	HY-P71475
Synonyms:	tdcD; c3873; Propionate kinase; EC 2.7.2.15
Species:	E.coli
Source:	E. coli
Accession:	P59244 (1M-402A)
Gene ID:	/
Molecular Weight:	Approximately 50.4 kDa

PROPERTIES

AA Sequence	MNEFPVVLVI NCGSSSIKFS VLNASDCEVL MSGIADGINS ENAFLSVNGG EPAPLAHHSY EGALKAIAFE LEKRNLNDNV ALIGHRIAAG GSIFTESAII TDEVIDNIRR VSPLAPLHNY ANLSGIESAQ QLFPGVTQVA VFDTSFHQTM APEAYLYGLP WKYYEELGVR RYGFGHTSHR YVSQRAHSLL NLAEDDSGLV VAHLGNGASI CAVRNGQSVD TSMGMTPLEG LMMGTRSGDV DFGAMSWVAS QTNQSLGDLE RVVNKESGLL GISGLSSDLR VLEKAWHEGH ERAQLAIKTF VHR IARHIAG HAASLHRLDG IIFTGGIGEN SSLIRRLVME HLAVLGVEID TEMNNRSNSF GERIVSSENA RVICAVIPTN EEKMIALDAI HLGKVNAPAE FA
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Propionate kinase, encoded by the TdcD gene, is an enzyme that catalyzes the conversion of propionyl phosphate and ADP to propionate and ATP. This biochemical reaction is part of propionate metabolism, where propionate, a three-carbon organic acid, is utilized or produced in various metabolic pathways. The enzymatic activity of propionate kinase is crucial for the interconversion of propionyl phosphate and propionate, providing a means for the cell to regulate propionate levels and participate in energy transfer through the generation of ATP. It has to emphasize the specific catalytic function of propionate kinase, underscoring its role in the cellular processes associated with propionate metabolism and energy production.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA