

TMK Protein, Bacillus anthracis (His)

Cat. No.:	HY-P72177
Synonyms:	tmk; BAMEG_0039Thymidylate kinase; EC 2.7.4.9; dTMP kinase
Species:	Others
Source:	E. coli
Accession:	C3LJ02 (M1-L208)
Gene ID:	45020070
Molecular Weight:	Approximately 25 kDa

PROPERTIES

AA Sequence	<p>M K G L F V T I E G P E G S G K T T L I Q S L L P Y F E Q K E Q K V M A T R E P</p> <p>G G I A I S E D I R T I L H K Q E Y T M M E A R T E A L L Y A A A R R Q H L V E</p> <p>K V M P A L N E D Y L V L C D R F I D S S L A Y Q G Y A R G L G M D K V F E I N</p> <p>R F A T E D C M P S L T I Y L D I E P E V G L A R I A K D A G R E V N R L D M E</p> <p>D I S F H K R V R E G Y L Q V V E R F S D R I V L V N A D Q P M E K L I E E V I</p> <p>Q V I E D K L L</p>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized a 0.2 µm filtered solution of 50 mM PBS, 300 mM NaCl, 5% trehalose, 5% mannitol and 0.01% Tween80, pH 7.4.
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	<p>The TMK Protein orchestrates a crucial role in catalyzing the phosphorylation of deoxythymidine monophosphate (dTMP), a pivotal step in the synthesis of deoxythymidine triphosphate (dTTP) within both the de novo and salvage pathways. This enzymatic process leads to the conversion of dTMP into deoxythymidine diphosphate (dTDP), serving as a vital intermediate in dTTP biosynthesis. The involvement of TMK Protein in facilitating this phosphorylation event underscores its central regulatory role in modulating the production of dTTP, a fundamental nucleotide essential for DNA synthesis. A</p>
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comprehensive understanding of TMK Protein's engagement in these pathways enhances our insight into cellular nucleotide dynamics and, consequently, contributes to the maintenance of genomic stability.

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

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