

## metK Protein, Shigella sonnei (His)

Cat. No.:	HY-P701983
Synonyms:	metK; S-adenosylmethionine synthase; AdoMet synthase; MAT; Methionine adenosyltransferase
Species:	Others
Source:	E. coli
Accession:	Q3YXS9 (M1-K384)
Gene ID:	75205223
Molecular Weight:	Approximately 44 kDa

### PROPERTIES

Appearance	Solution
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM HEPES, pH7.5, 200 mM NaCl, 20% glycerol, 1 mM DTT.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

### DESCRIPTION

Background	MetK, or methionine adenosyltransferase, plays a crucial role in cellular metabolism by catalyzing the formation of S-adenosylmethionine (AdoMet) from methionine and ATP. This enzymatic reaction involves two sequential steps: the initial synthesis of AdoMet and the subsequent hydrolysis of tripolyphosphate, occurring before the release of AdoMet from the enzyme. S-adenosylmethionine serves as a primary methyl donor in various biochemical reactions, participating in processes such as DNA methylation, protein methylation, and the biosynthesis of polyamines and certain secondary metabolites. MetK's activity is pivotal for maintaining cellular methylation potential and ensuring the availability of AdoMet, a key cofactor involved in numerous essential metabolic pathways. It has to succinctly outline MetK's role in the synthesis of S-adenosylmethionine, emphasizing its significance in cellular methylation processes and broader metabolic regulation.
------------	--

**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](mailto:tech@MedChemExpress.com)

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