

S-adenosylmethionine synthetase (AdoMetS), Active, *E. coli* Recombinant

CATALOG NO:

P1211-50 50 µg
P1211-150 150 µg

ALTERNATE NAMES:

Methionine adenosyltransferase, AdoMet synthetase, MAT

SOURCE:

E. coli

PURITY:

> 90% by SDS-PAGE

MOL. WEIGHT:

This protein is fused with a HIS tag at the N-terminus and the protein has a calculated MW of 43 kDa, (aa 1-384)

FORM:

Liquid

FORMULATION:

Proprietary formulation

STORAGE CONDITIONS:

Store at -80°C. Use within 6 months.

DESCRIPTION:

S-Adenosylmethionine synthase, (AdoMetS), (E.C. 2.5.1.6) catalyzes the formation of S-adenosylmethionine (AdoMet) from methionine and ATP. The overall synthetic reaction is composed of two sequential steps, AdoMet formation and the subsequent triphosphate hydrolysis which occurs prior to release of AdoMet from the enzyme. BioVision's active AdoMetS is suitable for functional assays, high-throughput screening and preclinical studies in drug discovery.

SPECIFIC ACTIVITY:

The enzyme has a specific activity of ≥50 mU/mg.

UNIT DEFINATION:

One unit of Adenosylmethionine synthetase enzyme converts 1 µmole of L-methionine and ATP to S-adenosyl-L-methionine (AdoMet), inorganic phosphate (Pi), and pyrophosphate (PPi) at 37°C and pH 7 using modified BioVision's Methionine Assay kit (K442).

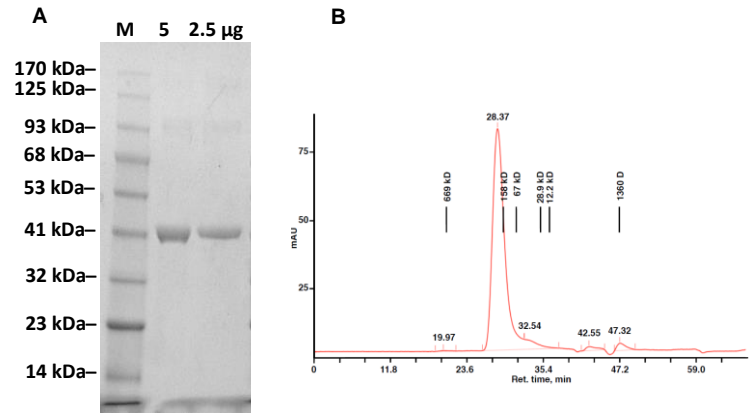


Fig A. SDS-PAGE (4-20%) of Recombinant AdoMetS: Recombinant Protein loaded under reducing conditions and stained with Coomassie Blue. Lane M-MW, Lanes 2-3 AdoMetS

Fig B. Size exclusion chromatography of AdoMetS: SEC analysis of AdoMetS using a Superose 12 HR 10/30 column at 0.4 ml/min in 50 mM sodium phosphate and 0.3 M NaCl pH 7.2

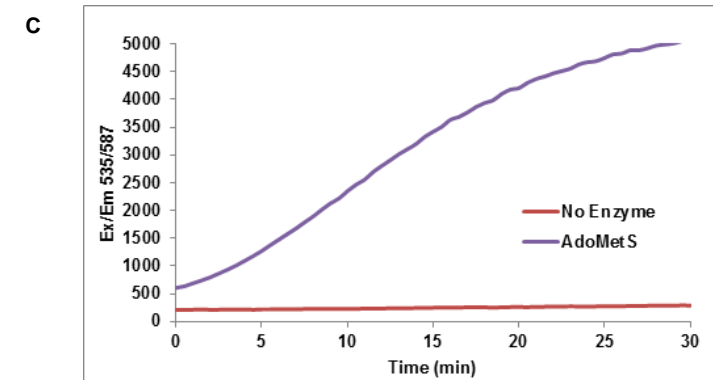


Fig C. Activity plot of AdoMetS converting L-methionine and ATP to S-adenosyl-L-methionine (AdoMet) inorganic phosphate (Pi), and pyrophosphate (PPi) followed by detection of PPi: Specific activity of AdoMetS is ≥50 mU/mg. 7µg AdoMetS reacts with 1 mM L-methionine and ATP at pH 7 and 37°C.

RELATED PRODUCTS:

- Methionine Assay Kit (Fluorometric) (Cat. No. K442)
- *B. subtilis* Recombinant, Oxalate oxidase (OxOx) (Cat. No. P1091)
- Recombinant *E. coli*, Taurine Dioxygenase (TauD) (Cat. No. P1071)

FOR RESEARCH USE ONLY! Not to be used on humans.