Recombinant human MAT1A protein

Catalog Number: ATGP0489

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-395aa

UniProt No.
Q00266

NCBI Accession No.
NP_000420.1

Alternative Names
S-adenosylmethionine synthetase, MAT, MATA1, SAMS, SAMS1, methionine adenosyltransferase I alpha, S-adenosylmethionine synthetase, MAT1A,

PRODUCT SPECIFICATION

Molecular Weight
45.8 kDa (415aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 0.1M NaCl, 10% glycerol

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
MAT1A catalyzes the formation of S-adenosyltransferase (AdoMet) for methionine catabolism in the liver. MAT1A expression also correlates with a differentiated phenotype, whereas liver cells expressing MAT2A present a dedifferentiated phenotype and lowered AdoMet synthesis. Likewise, NFkappaB and TNFalpha cause a switch from MAT1A to MAT2A expression in human hepatocellular carcinoma (HCC), which facilitates cancer cell growth. Recombinant human MAT1A protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by

using conventional chromatography techniques.

Amino acid Sequence

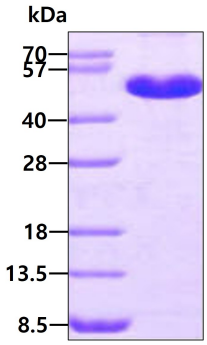
<MGSSHHHHHH SSGLVPRGSH> MNGPVDGLCD HSLSEGVFMF TSESVGEGHP DKICDQISDA VLDAHLKQDP NAKVACETVC KTGMVLLCGE ITSMAMVDYQ RVVRDTIKHI GYDDSAKGFD FKTCNVLVAL EQQSPDIAQC VHLDRNEEDV GAGDQGLMFG YATDETEECM PLTIILAHKL NARMADLRRS GLLPWLRPDS KTQVTVQYMQ DNGAVIPVRI HTIVISVQHN EDITLEEMRR ALKEQVIRAV VPAKYLDEDT VYHLQPSGRF VIGGPQGDAG VTGRKIIVDT YGGWGAHGGG AFSGKDYTKV DRSAAYAARW VAKSLVKAGL CRRVLVQVSY AIGVAEPLSI SIFTYGTSQK TERELLDVVH KNFDLRPGVI VRDLDLKKPI YQKTACYGHF GRSEFPWEVP RKLVF

General References

Ding W., et al. (2009) Hepatology. 49(4):1277-86.
Tomasi ML., et al. (2009) Gastroenterology. 136(3):1025-36.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.