



Product Datasheet

Product Name	Methionine Adenosyltransferase II Alpha Human Recombinant
Cata No	CB500497
Source	<i>Escherichia Coli.</i>
Synonyms	MATA2, MATII, SAMS2, MAT-2A, S-adenosylmethionine synthetase isoform type-2, AdoMet synthetase 2, Methionine adenosyltransferase 2, Methionine adenosyltransferase II, MAT2A, AMS2.

Description

MAT2A is an important enzyme in cellular metabolism and catalyzes the formation of S-adenosylmethionine (SAME) from L-methionine and ATP. MAT2A is expressed in extrahepatic tissues. In liver, MAT2A expression associates with growth, dedifferentiation, and cancer. NF-kappa B and AP-1 are necessary for basal MAT2A expression in HepG2 cells and mediate the increase in MAT2A expression in response to TNF-alpha.

Up-regulation of MAT2A provides growth improvement and s-adenosylmethionine and methylthioadenosine thus can block mitogenic signaling in colon cancer cells. Lower expression of both MAT2A and MAT2beta and interfere with leptin signaling in liver cancer cells.

MAT2A Human Recombinant fused with His tag (20 a.a.) at C-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 415 amino acids and having a molecular mass of 45.8 kDa.

The MAT2A is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered colorless solution.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Formulation

The MAT2A solution (1mg/ml) contains 20mM Tris pH-8 & 10% glycerol.

Stability

MAT2A although stable 4°C for 4 weeks, should be stored desiccated below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

MGSSHHHHH SSGLVPRGSH MNGQLNGFHE
AFIEEGTFLF TSESVGEGHP DKICDQISDA
VLDAHLQQDP DAKVACETVA KTG MILLAGE
ITSRAAVDYQ KVVREAVKHI GYDDSSKGF
YKTCNVLVAL EQQSPDIAQG VHLDRNEEDI
GAGDQGLMFG YATDETEECM PLTIVLAHKL
NAKLAE LRRN GTLPWLRPDS KTQVTVQYMQ
DRGAVLPIRV HTIVISVQHD EEVCLDEM RD
ALKEKVIKAV VPAKYLDEDT IYHLQPSGRF
VIGGPQGDAG LTGRKIIVDT YGGWGAHGGG
AFSGKD YTKV DRSAAYAARW VAKSLVKGGL
CRRVLVQVSY AIGVSHPLSI SIFHYGTSQK
SERELLEIVK KNFDLRPGVI VRDLDLKKPI
YQRTAAYGHF GRDSFPWEVP KKLKY