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MAT1A Rabbit pAb

Catalog # AP97939

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q00266
Other Accession	Q00266
Reactivity	Mouse
Predicted	Rat, Human, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43648
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MAT1A
Epitope Specificity	231-330/395
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the AdoMet synthase family.
SUBUNIT	Homotetramer (MAT-I) or homodimer (MAT-III).
Post-translational modifications	S-nitrosylation of Cys-120 inactivates the enzyme.
DISEASE	Methionine adenosyltransferase deficiency (MATD) [MIM:250850]: An inborn error of metabolism resulting in isolated hypermethioninemia. Most patients have no clinical abnormalities, although some neurologic symptoms may be present in rare cases with severe loss of methionine adenosyltransferase activity. Note: The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MAT1A catalyzes a two-step reaction that involves the transfer of the adenosyl moiety of ATP to methionine to form S-adenosylmethionine and tripolyphosphate, which is subsequently cleaved to PPi and Pi. S-adenosylmethionine is the source of methyl groups for most biological methylations. Mutations in this gene are associated with methionine adenosyltransferase deficiency.

Additional Information

Gene ID	4143
Other Names	AdoMet; Ams; MAT; MATA1; SAMS; SAMS1; SADE; SAS; METK1_HUMAN; MAT1A; AdoMet synthase 1; Methionine adenosyltransferase 1 (MAT 1); Methionine adenosyltransferase I/III (MAT-I/III); 2.5.1.6; AMS1; METK1_MOUSE; METK1_RAT; methionine adenosyltransferase 1A; methionine adenosyltransferase I, alpha; S-adenosylmethionine synthetase;

	S-adenosylmethionine synthase isoform type-1; methionine adenosyltransferase I/III
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	MAT1A
Synonyms	AMS1, MATA1
Function	Catalyzes the formation of S-adenosylmethionine from methionine and ATP. The reaction comprises two steps that are both catalyzed by the same enzyme: formation of S-adenosylmethionine (AdoMet) and triphosphate, and subsequent hydrolysis of the triphosphate.
Tissue Location	Expressed in liver..

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.