

## MAT1A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12704a

## **Specification**

### MAT1A Antibody (N-term) - Product Information

Application WB, IHC-P,E
Primary Accession Q00266

Other Accession P13444, Q91X83, Q2KIC6, NP 000420.1

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 107-136

## MAT1A Antibody (N-term) - Additional Information

#### **Gene ID 4143**

### **Other Names**

S-adenosylmethionine synthase isoform type-1, AdoMet synthase 1, Methionine adenosyltransferase 1, MAT 1, Methionine adenosyltransferase I/III, MAT-I/III, MAT1A, AMS1, MATA1

## Target/Specificity

This MAT1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-136 amino acids from the N-terminal region of human MAT1A.

## **Dilution**

WB~~1:1000 IHC-P~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

MAT1A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# MAT1A Antibody (N-term) - 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.

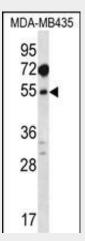
**Tissue Location** Expressed in liver...

## MAT1A Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

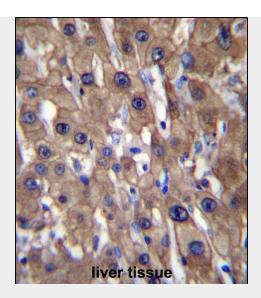
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## MAT1A Antibody (N-term) - Images



MAT1A Antibody (N-term) (Cat. #AP12704a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the MAT1A antibody detected the MAT1A protein (arrow).





MAT1A Antibody (N-term) (Cat. #AP12704a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MAT1A Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# MAT1A Antibody (N-term) - Background

This gene 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. The encoded protein is found as a homotetramer (MAT I) or a homodimer (MAT III) whereas a third form, MAT II (gamma), is encoded by the MAT2A gene. Mutations in this gene are associated with methionine adenosyltransferase deficiency.

# MAT1A Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Wu, S.M., et al. Cell. Mol. Life Sci. 67(11):1831-1843(2010) Lai, C.Q., et al. Am. J. Clin. Nutr. 91(5):1377-1386(2010) Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010) Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :

# MAT1A Antibody (N-term) - Citations

- <u>Glucocorticoid-induced S-adenosylmethionine Enhances the IFN Signaling Pathway by</u> Restoring STAT1 Methylation in Hepatitis B Virus Infected Cells.
- Hepatic metabolite profiles in mice with a suboptimal selenium status.