

## Mouse Methionine Adenosyltransferase I Alpha (MAT1a) ELISA Kit-Sandwich

**Cat. No.:** EK6F281

**Product Type:** Animal Immunoassay Kits

**Size:** 48T;96T

### Product Overview

BioVenic Mouse Methionine Adenosyltransferase I Alpha (MAT1a) ELISA Kit-Sandwich is designed for the quantitative determination of Mouse MAT1a in serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids using a Sandwich ELISA method. For research use only.

### Specifications

Assay Type	ELISA-Sandwich
Specificity	The assay kit is specific for Mouse Methionine Adenosyltransferase I Alpha (MAT1a).
Target Species	Mouse
Species Reactivity	Mouse
Detection Range	0.8-50 ng/mL
Reproducibility	Intra-Assay: CV < 10%; Inter-Assay: CV < 12%
Assay Time	Around 90 min
Sample Requirement	Serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids.

### Target Information

S-adenosylmethionine synthase isoform type-1 is responsible for catalyzing the conversion of methionine and ATP into S-adenosylmethionine. This two-step reaction, both facilitated by the same enzyme, involves the formation of S-adenosylmethionine (AdoMet) and triphosphate, followed by the hydrolysis of the triphosphate. MAT1A is primarily expressed in mature hepatocytes under normal conditions and is a crucial enzyme in liver metabolism, contributing to the synthesis of SAME. SAME functions not only as a methyl donor but also aids in the production of glutathione (GSH), a vital antioxidant that protects the liver from oxidative stress. In mice lacking MAT1A, significant liver pathologies are observed, including hepatic steatosis, liver fibrosis, cirrhosis, and an increased risk of liver cancer.

Target/Biomarker	Mouse MAT1a
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Target Synonym	MAT; SAMS; MATA1; SAMS1; AMS1; S-Adenosylmethionine Synthetase; S-adenosyl methionine synthase isoform type-1
Gene ID	<a href="#">11720</a>
UniProt ID	<a href="#">Q91X83</a>

### Shipping and Storage

This product is shipped with gel ice packs. It is recommended to store at 2-8 °C (Up to 6 months).

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.