

# Rat S-adenosylmethionine synthase isoform type-1 (MAT1A) ELISA Kit

Catalog No: #EK9877

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Package Size: #EK9877-1 48T #EK9877-2 96T

## Description

Product Name	Rat S-adenosylmethionine synthase isoform type-1 (MAT1A) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	RP11-36D19.2; MAT; MATA1; SAMS; SAMS1; S-adenosylmethionine synthetase
Accession No.	P13444
Uniprot	P13444
GeneID	25331;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.78-50 ng/mL

Sensitivity:0.32 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate MAT1A in samples. An antibody specific for MAT1A has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMAT1A present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MAT1A is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of MAT1A bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**MAT1a catalyzes a two-step reaction that involves the transfer of the adenosyl moiety of ATP to methionine to form S-adenosylmethionine and triphosphosphate, 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.The peptide maps of the 2 forms were possibly identical, although they showed different specific activities at physiologic concentrations of methionine. The findings suggested that the 2 isoforms are encoded by the same gene.

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Note: This product is for in vitro research use only