

## Mouse anti-SAH 8a

<b>Product name</b>	Mouse anti-SAH 8a
<b>Catalog Number</b>	MA00308-50
<b>Description</b>	Mouse monoclonal antibody against S-Adenosylhomocysteine [839-12]
<b>Specificity</b>	MA00308 shows the following reactivities with related compounds: S-Adenosylhomocysteine: 100%, S-Adenosylmethionine: ~1.33%, Adenosine: < 1%, Homocysteine: < 1%, L-Cysteine: < 1%, Glutathione: < 1%, L-Cystathionine: < 1%, Methythioadenosine (MTA): < 5%, ADP (adenosine diphosphate): < 1%, ATP (adenosine triphosphate): < 1%
<b>Immunogen</b>	S-Adenosylhomocysteine conjugated to BSA

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Store at 4°C, -20°C for long term storage
<b>Storage buffer</b>	PBS 10mM pH7.4 (NaCl 150mM), Sodium azide 0.02%, BSA 10mg/ml or PBS 10mM pH7.4 (NaCl 150mM), Sodium azide 0.02%, Glycerol 50%, BSA 10mg/ml
<b>Purity</b>	>95% Purified from mouse ascites fluid by affinity chromatography
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	839-12
<b>Immunoglobulin isotype</b>	IgG2a
<b>Affinity</b>	$K_a = 6.8 \times 10^9 \text{L/mol}$ ( $1.47 \times 10^{-10} \text{M}$ )
<b>Research Areas</b>	Methylation of biomolecules (DNA, RNA, proteins, hormones, neurotransmitters, etc.) One-carbon metabolism Signal Transduction Metabolism Pathways and Processes Cancers Arthritis Heart diseases Neurodegenerative diseases Atherosclerosis Liver diseases Kidney diseases

## Applications

The use of MA00308 in the following tested applications has been tested. The titer was measured using indirect assay with the concentration of the antibody at 1mg/ml.

The application notes include recommended starting dilutions. Optimal dilutions/concentrations should be determined by the end user. Higher dilution than suggested maybe used in IHC and IF. The product may be used in other not-yet-tested applications.

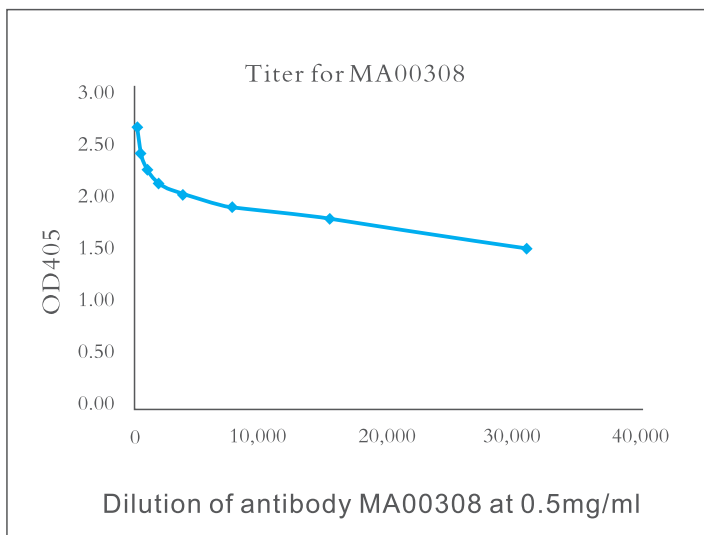
Application	Notes
cELISA	1:25,000/35,000
FCM	1:200
IHC	1:200

## Target

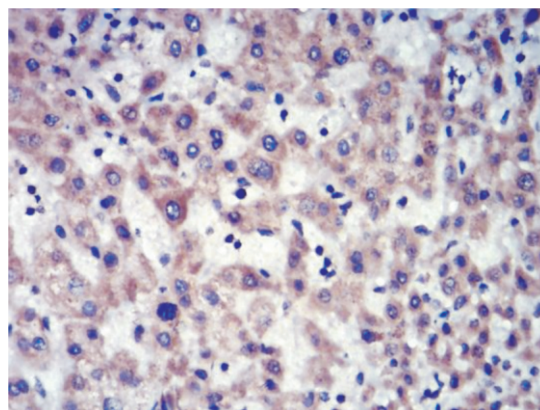
S-adenosylhomocysteine is a competitive inhibitor of S-adenosylmethionine-dependant methyl transferase reactions. Therefore, it plays a key role in the control of methylation via regulation of the intracellular concentration of S-adenosylhomocysteine.

**Cellular localization** Cytoplasm, nuclear

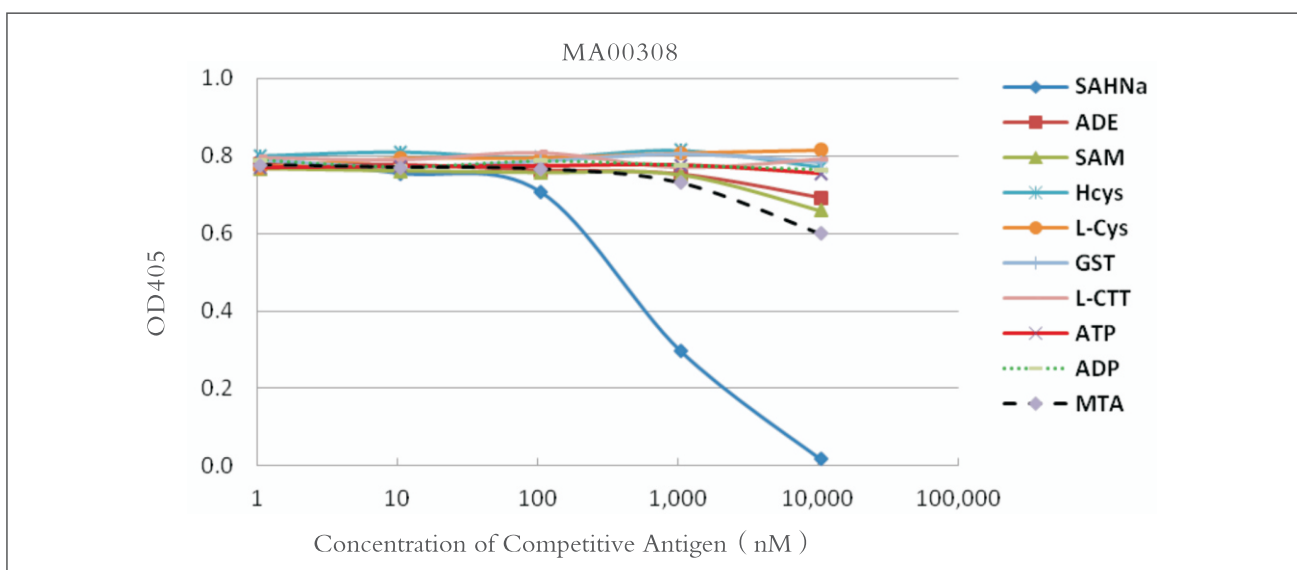
## Anti-Adenosylhomocysteine antibody [839-12]



**Figure 1** Titration curve for purified monoclonal antibody 839-12 at 0.5mg/ml.



**Figure 3** Immunohistochemistry staining was performed using MA00308 with benign liver tissue adjacent to liver cancer. Brown areas indicated positive staining in nuclear and cytoplasmic areas (mainly shown cytoplasmic positive staining). Strong HE staining may affect nuclear SAH positive signals (x400).



**Figure 2** Competitive ELISA using anti-S-Adenosymethionine monoclonal antibody [839-12] (MA00308)

The 0.2  $\mu$ g/ml of SAH-BSA was coated into 96 wells. Serial dilution of SAH standard (SAHNa), S-Adenosylmethionine (SAM: Sigma-Aldrich Cat# A2408), Homocysteine (H-Cys), L-Cysteine (L-Cys), Adenosine (Ade), Glutathione (GST), L-Cystathionine (L-CTT), Methythioadenosine (MTA), ADP (adenosine diphosphate), ATP (adenosine triphosphate) and properly diluted MA00308 were added. HRP conjugated Goat anti-Mouse IgG antibody was used to develop the color. OD450 value was measured on each well.