

Anti-S-Adenosylmethionine Antibody

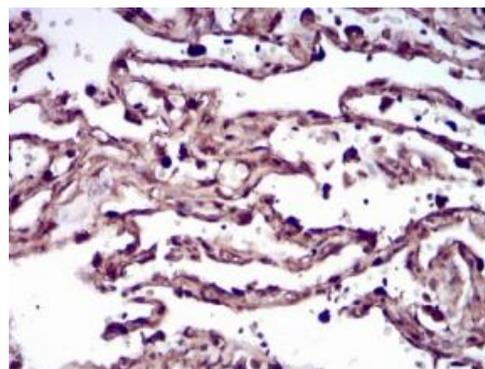
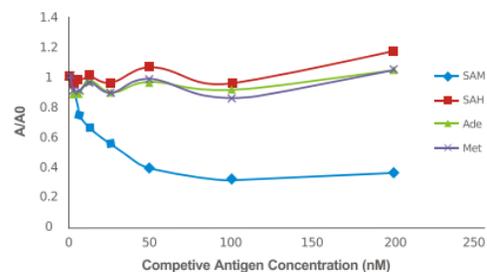
ALTERNATE NAMES:	S-Adenosylmethionine
CATALOG #:	6944-25
AMOUNT:	25 µg
HOST/ISOTYPE:	Rabbit IgG
IMMUNOGEN:	S-Adenosylmethionine Aza-SAM analog conjugated to KLH
INTERNAL ID:	DM-13
FORM:	Liquid
FORMULATION:	10 mM PBS (pH 7.4), 0.02% Sodium azide, 50% Glycerol and 1% BSA
PURIFICATION:	>95% Purified from mouse ascites fluid by affinity chromatograph
SPECIES REACTIVITY:	All
STORAGE CONDITIONS:	Store at 4°C; for long storage, store at -20°C. Avoid multiple freeze-thaw cycles.

DESCRIPTION: S-Adenosylmethionine (SAM) is a naturally occurring compound that is found in almost every tissue and fluid in the body. It is a common co-substrate involved in methyl group transfers. It is made from adenosine triphosphate (ATP) and methionine by methionine adenosyl transferase. Transmethylation, transsulfuration, and aminopropylation are the metabolic pathways that use SAM. Although these anabolic reactions occur throughout the body, most SAM is produced and consumed in the liver. SAM plays a role in the immune system, maintains cell membranes, and helps produce and break down brain chemicals, such as serotonin, melatonin, and dopamine. It works with vitamin B12 and folate (vitamin B9). Being deficient in either vitamin B12 or folate may reduce levels of SAM in your body.

APPLICATION: cELISA: 1:2500, FCM: 1: 20/40, IHC: 1: 20/40.

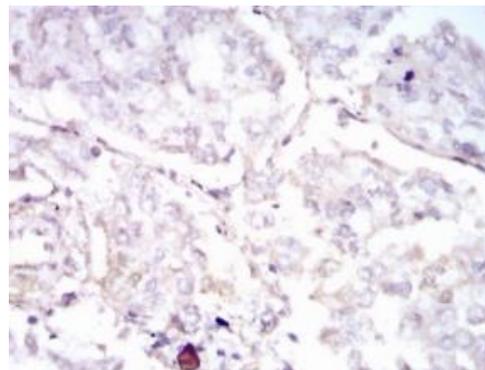
Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

FOR RESEARCH USE ONLY! Not to be used on humans.

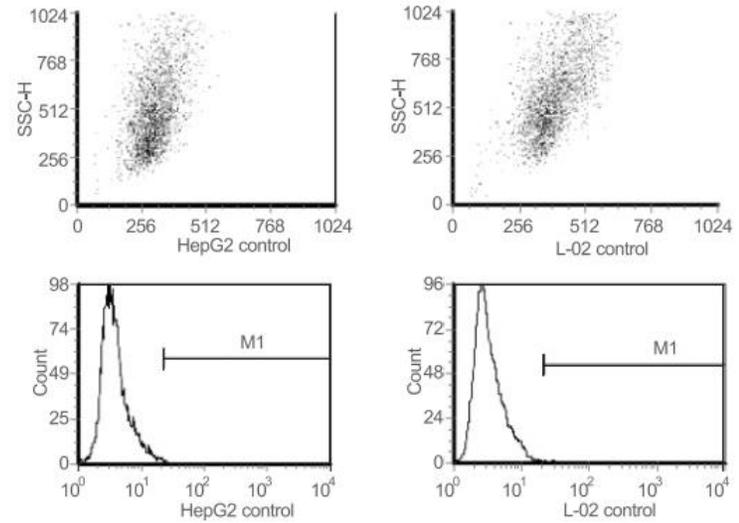
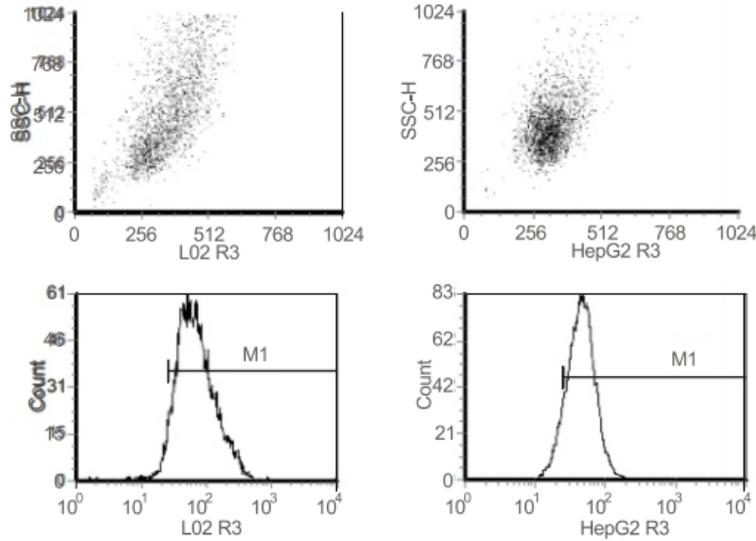


Competitive ELISA: 0.1 µg/ml of SAM coating standard was coated into 96 wells. Serial dilution of SAM standard, S-Adenosylhomocysteine (SAH), Adenosine, L-Methionine and antibody were added. HRP conjugated Goat anti-rabbit IgG antibody was used to develop the color. The A is the OD450 value of the test well and the A0 is the OD450 of the well without competitive antigen.

Immunohistochemistry staining was performed using the antibody with benign lung tissue adjacent to carcinoma. Brown areas indicated strong positive staining in cytoplasm (X400).



The immunohistochemical staining was performed for the same sample as in the above figure with lung cancer tissue. Cytoplasm showed background staining (further dilution beyond 1:200 is required) with the antibody (X400).



Marker	Low bound	High bound	# of Events	# of gated cells	Geometric Mean
ALL	1	10000	10000	100.0	67.74
M1	26	10000	9424	94.24	73.92

Marker	Low bound	High bound	# of Events	# of gated cells	Geometric Mean
ALL	1	10000	10000	100.0	44.41
M1	26	10000	8709	87.09	49.87

Marker	Low bound	High bound	# of Events	# of gated cells	Geometric Mean
ALL	1	10000	10000	100.0	3.86
M1	22	10000	67	0.67	40.15

Marker	Low bound	High bound	# of Events	# of gated cells	Geometric Mean
ALL	1	10000	10000	100.0	3.35
M1	22	10000	70	0.7	39.35

FCM results from normal liver cell line L02 and hepatocyte carcinoma cell line Hep G2 stained with anti-SAM polyclonal antibody. Average fluorescence signal in Hep G2 cells was reduced compared to that in L02 cells, indicating SAM level is reduced during carcinogenesis.

FCM analysis control. Normal liver cells L02 and carcinoma cells Hep G2 were stained with the buffer without any antibody.

RELATED PRODUCTS:

- S- Adenosylmethionine Antibody (Clone # 118-6) (Cat # 6940-25)
- S- Adenosylmethionine Antibody (Clone # 84-3) (Cat # 6941-25)
- S- Adenosylmethionine Antibody (Clone # 118-18) (Cat # 6942-25)
- S- Adenosylmethionine Antibody (Clone # 84-19) (Cat # 6943-25)
- S- Adenosylhomocysteine Antibody (Clone # 310-10) (Cat # 6945-25)