

#### S- Adenosylmethionine Antibody (Clone # 84-3) Mouse Monoclonal Antibody Catalog # ABV11452

## Specification

## S- Adenosylmethionine Antibody (Clone # 84-3) - Product Information

Application Reactivity Host Clonality Isotype E, IHC All Species Mouse Monoclonal Mouse IgG2b

#### S- Adenosylmethionine Antibody (Clone # 84-3) - Additional Information

Positive Control

Application & Usage

**Other Names** S- Adenosylmethionine

**Target/Specificity** S Adenosylmethionine

Antibody Form Liquid

Appearance Colorless liquid

Formulation 10 mM PBS (pH 7.4), 0.02% Sodium azide, 50% Glycerol and 1% BSA

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** S- Adenosylmethionine Antibody (Clone # 84-3) is for research use only and not for use in diagnostic or therapeutic procedures.

### S- Adenosylmethionine Antibody (Clone # 84-3) - Protein Information

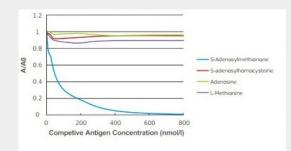
IHC: liver carcinoma tissue, FCM: HepG2 and L02 cell lines cELISA: 1:10000, FCM: 1:200/400, IHC: 1:200/400.



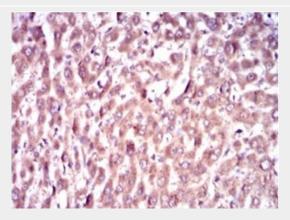
# S- Adenosylmethionine Antibody (Clone # 84-3) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- S- Adenosylmethionine Antibody (Clone # 84-3) Images

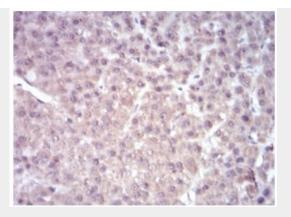


Competitive ELISA: 0.1 g/ml of SAM coating standard was coated into 96 wells. Serial dilution of SAM standard, S-Adenosylhomocysteine (SAH), Adenosine, L-Methionine and antibody were added. HRP conjugated Goat anti-Mouse IgG antibody was used to develop the color. The A is the OD450 value of the test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



Immunohistochemistry staining was performed using the antibody with benign liver 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 liver cancer tissue.Cytoplasm showed background staining (further dilution beyond 1:200 is required) with the antibody (X400).

## S- Adenosylmethionine Antibody (Clone # 84-3) - Background

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.