

## Alexa Fluor<sup>®</sup> 647-anti-SAM 1a/b

<b>Product name</b>	Alexa Fluor <sup>®</sup> 647-anti-SAM 1a/b
<b>Catalog Number</b>	MAF00201-25/50
<b>Description</b>	Alexa Fluor <sup>®</sup> 647 (AF647) conjugated anti-S-adenosylmethionine monoclonal antibody clone 118-6
<b>Specificity</b>	MAF00201 shows the same specificity as un-conjugated mouse anti-SAM monoclonal antibody MA00201.

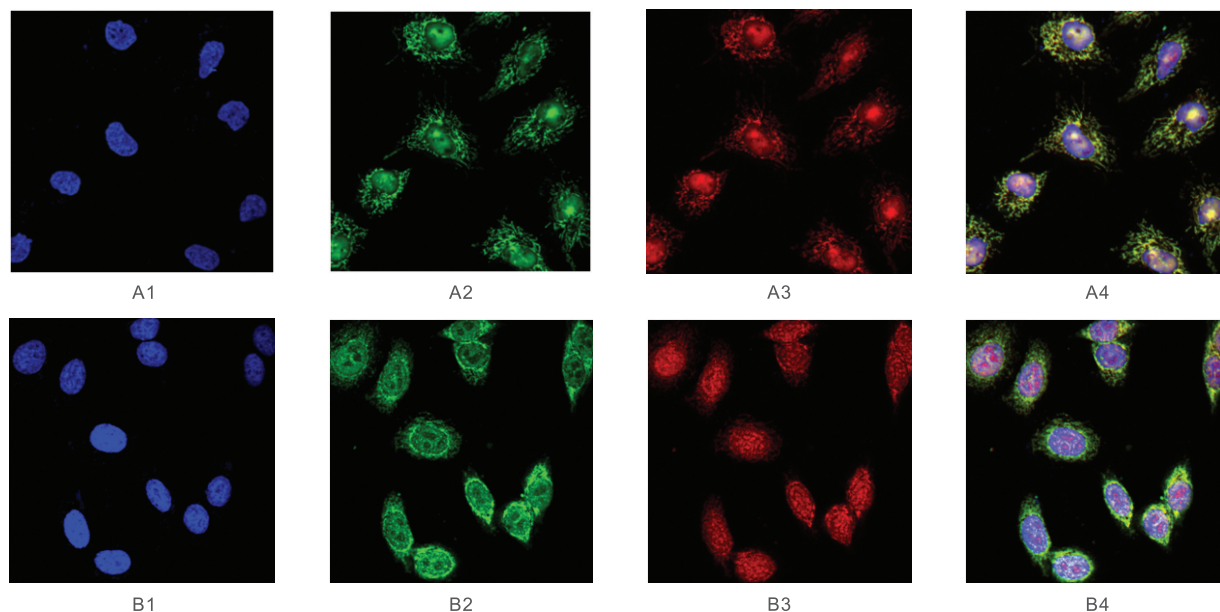
### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Store at 2-8°C in dark, do not freeze.
<b>Concentration</b>	2-4mg/ml, lot specific
<b>Storage buffer</b>	50mM Tris, 150mM NaCl, pH8.0, 0.2% BSA (Sigma), 0.09%NaN <sub>3</sub>
<b>Dilution buffer</b>	PBS, pH 7.4, 1% fetal bovine serum or 0.5% BSA, 0.09%NaN <sub>3</sub>
<b>Purity</b>	>95% purified with Sephacryl S-200, free from un-conjugated antibody and Alexa Fluor <sup>®</sup> 647
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	118-6
<b>Immunoglobulin isotype</b>	mouse IgG2b
<b>Research Areas</b>	Methylation of biomolecules (DNA, RNA, proteins, hormones, neurotransmitters, etc.) One-carbon metabolism Signal Transduction Metabolism Pathways and Processes Cancer Arthritis Neurodegenerative diseases Atherosclerosis Liver diseases Kidney diseases

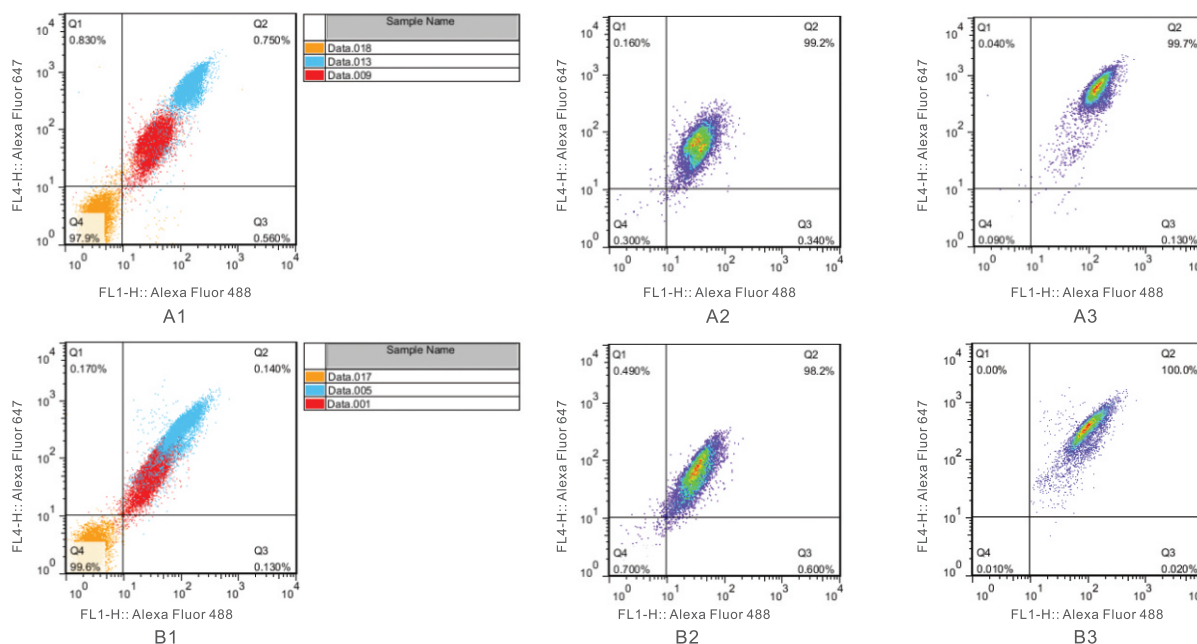
### Applications

The use of MAF00201 in the following applications has been tested. The application notes include recommended and tested dilutions. Optimal dilutions/concentrations should be determined by the end user based on the test environment and purposes.

Application	Recommended
Flow Cytometry (FCM)	4-18 µg/ml
Immunofluorescence Laser Scanning Confocal Microscopy (LSCM)	4-8 µg/ml



**Figure 1** Immunofluorescence (IF) staining of HepG2 and L02 cells double stained with AF488-anti-SAH 301-3 (Cat# MAF00301) at 40µg/ml and AF647-anti-SAM 118-6 (Cat# MAF00201) at 8µg/ml followed by DAPI staining and photographed under the laser scanning confocal microscope (Zeiss LSM 780). (A1-A4) Normal liver cell line L02 cells cultured in RPMI 1640 with 10% FBS for 40h. Different views are as follows: DAPI (A1); AF488 for SAH (A2); AF647 for SAM (A3); Overlap of all the three fluorescent signals (A4). (B1-B4) Hepatocellular carcinoma cell line HepG2 cells cultured for 40h. Different views are follows: DAPI (B1); AF488 for SAH (B2); AF647 for SAM (B3); Overlap of all the three fluorescent signals (B4). Expression patterns of SAM and SAH are different between L02 and HepG2 cells (x630).



**Figure 2** Flow Cytometry of L02 (A1-A3) and HepG2 (B1-B3) cells double stained with Alexa Fluor®488 conjugated anti-SAH antibody 301-3 (Cat# MAF00301) at 36 µg/ml and Alexa Fluor® 647 conjugated anti-SAM antibody 118-6 (Cat# MAF00201) at 4.5 µg/ml. Color legend: Orange: blank; Blue: nuclear fixation/permeabilization buffer was used (eBioscience 00-5523 FoxP3\_TF Staining Buffer Set); Red: intracellular fixation/permeabilization buffer was used (eBioscience 00-8824). 100% confluent cells (cultured in RPMI 1640 with 10% FBS for 48h) were fixed and permeabilized with the intracellular fixation/permeabilization buffer (A2, B2) or the nuclear fixation/permeabilization buffer (A3, B3) and then double stained with antibodies indicated above. Cells were used for analysis with BD FACSCalibur Flow Cytometer. SAM expression is higher in L02 than HepG2 cells. Both SAM and SAH are expressed ubiquitously yet rather dynamically. The level of SAM is higher than that of SAH in both cells.