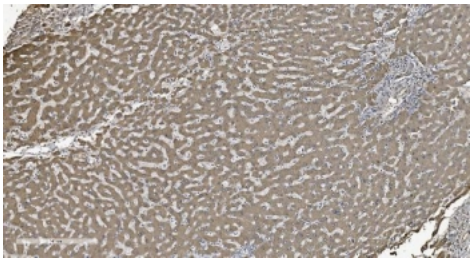
SHMT Antibody / SHMT1 [clone 9C7] (RQ6407)

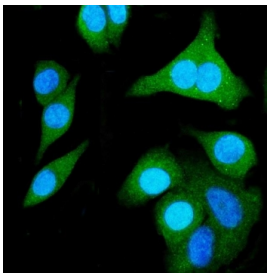
Catalog No.	Formulation	Size
RQ6407	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

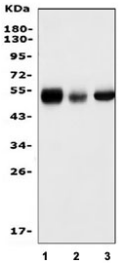
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	9C7
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P34896
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence (FFPE): 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This SHMT antibody is available for research use only.



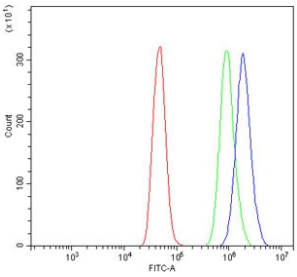
IHC staining of FFPE human liver cancer tissue with SHMT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human A549 cells with SHMT antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) monkey liver, 2) rat liver and 3) mouse liver tissue lysate with SHMT antibody. Predicted molecular weight ~53 kDa.



Flow cytometry testing of human A431 cells with SHMT antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SHMT antibody.

Description

This gene encodes the cytosolic form of serine hydroxymethyltransferase, a pyridoxal phosphate-containing enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. This reaction provides one-carbon units for synthesis of methionine, thymidylate, and purines in the cytoplasm. This gene is located within the Smith-Magenis syndrome region on chromosome 17. A pseudogene of this gene is located on the short arm of chromosome 1. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the SHMT antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids M1-S470) was used as the immunogen for the SHMT antibody.

Storage

After reconstitution, the SHMT antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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