

Rabbit Anti-SHMT2 antibody

SL17469R

| Product Name: | SHMT2 |
|------------------------|---|
| Chinese Name: | 丝氨酸甲基化酶mSHMT抗体 |
| Alias: | GLY A+; GLYA; glycine auxotroph A, human complement for hamster; Glycine hydroxymethyltransferase; GLYM_HUMAN; mitochondrial; Serine hydroxymethyltransferase 2 (mitochondrial); Serine hydroxymethyltransferase mitochondrial; Serine methylase; SHMT 2; SHMT; SHMT2. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 56kDa |
| Cellular localization: | cytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human SHMT2:51-150/504 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | <u>PubMed</u> |
| Product Detail: | This gene encodes the mitochondrial form of a pyridoxal phosphate-dependent enzyme that catalyzes the reversible reaction of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. The encoded product is primarily responsible for glycine synthesis. The activity of the encoded protein has been suggested to be the primary |

source of intracellular glycine. The gene which encodes the cytosolic form of this enzyme is located on chromosome 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]

Function:

Contributes to the de novo mitochondrial thymidylate biosynthesis pathway. Required to prevent uracil accumulation in mtDNA. Interconversion of serine and glycine. Associates with mitochondrial DNA.

Subcellular Location:

Mitochondrion. Mitochondrion matrix > mitochondrion nucleoid. Mitochondrion inner membrane.

Similarity:

Belongs to the SHMT family.

SWISS:

P34897

Gene ID:

6472

Database links:

Entrez Gene: 6472 Human

Entrez Gene: 108037 Mouse

Entrez Gene: 299857 Rat

Omim: 138450 Human

SwissProt: P34897 Human

Unigene: 741179 Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.