

Product datasheet for **AM20941PU-N**

SHMT1 (374-483) Mouse Monoclonal Antibody [Clone ID: 4F9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4F9
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA. Immunohistochemistry on Paraffin Sections: 5 µg/ml. Western Blot.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	SHMT1 (NP_004160, 374 a.a. ~ 483 a.a) partial recombinant protein with GST tag
Specificity:	This antibody reacts to Serine Hydroxymethyltransferase, Cytosolic (SHMT1) at 374-483.
Formulation:	PBS, pH 7.4 State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Upon receipt, store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	serine hydroxymethyltransferase 1
Database Link:	Entrez Gene 6470 Human P34896



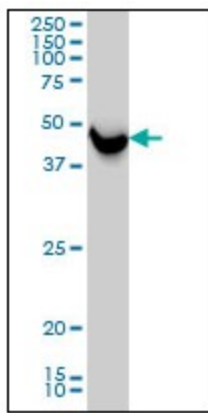
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Background: SHMT / SHMT1 is the cytosolic form of serine hydroxymethyltransferase, a pyridoxal phosphate-containing enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. This 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.

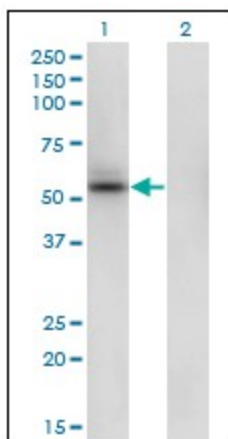
Synonyms: Serine methylase, Glycine hydroxymethyltransferase, Serine hydroxymethyltransferase cytosolic

Protein Pathways: Cyanoamino acid metabolism, Glycine, serine and threonine metabolism, Metabolic pathways, Methane metabolism, One carbon pool by folate

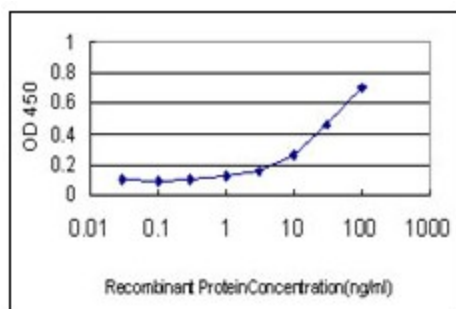
Product images:



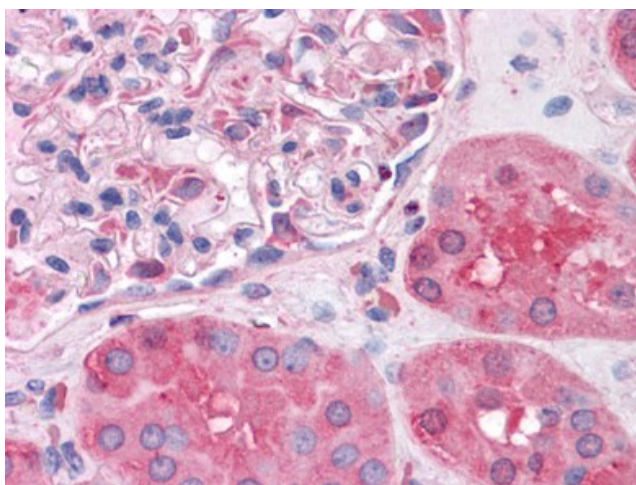
SHMT1 monoclonal antibody clone 4F9 Western Blot analysis of SHMT1 expression in HeLa.



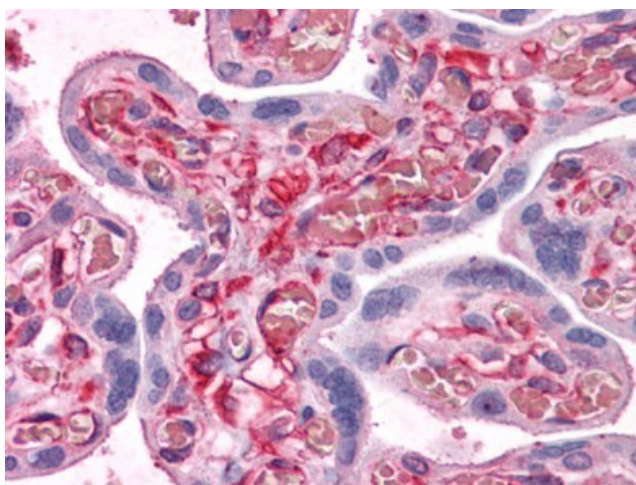
Western Blot analysis of SHMT1 expression in transfected 293T cell line by SHMT1 monoclonal antibody clone 4F9.



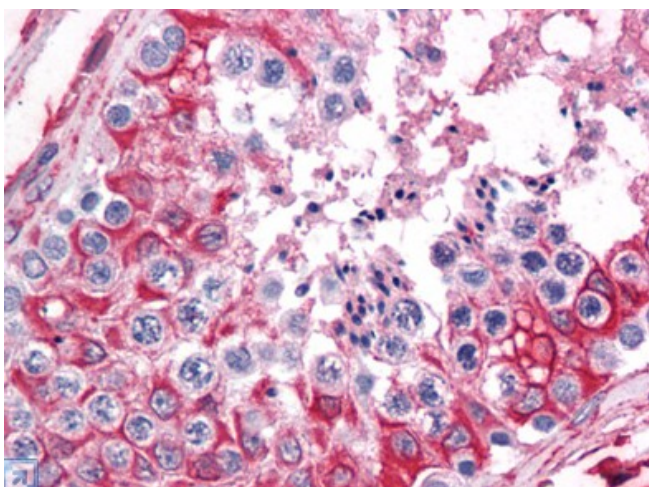
Detection limit for recombinant GST tagged SHMT1 is approximately 1 ng/ml as a capture antibody.



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Placenta: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)