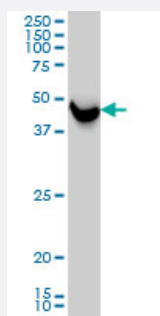


SHMT1 monoclonal antibody (M01), clone 4F9

Catalog # H00006470-M01

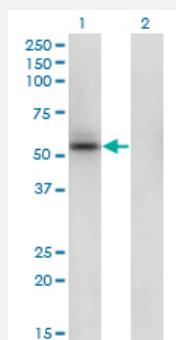
Size 100 ug

Applications



Western Blot (Cell lysate)

SHMT1 monoclonal antibody (M01), clone 4F9 Western Blot analysis of SHMT1 expression in HeLa (Cat # L013V1).

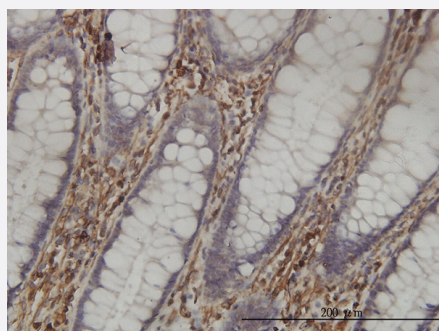


Western Blot (Transfected lysate)

Western Blot analysis of SHMT1 expression in transfected 293T cell line by SHMT1 monoclonal antibody (M01), clone 4F9.

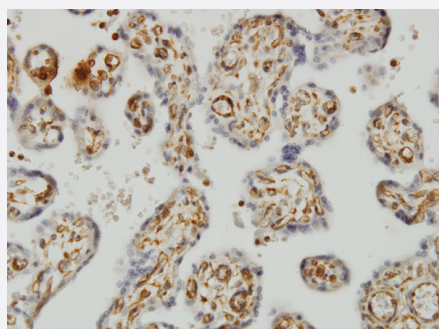
Lane 1: SHMT1 transfected lysate(53.1 KDa).

Lane 2: Non-transfected lysate.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SHMT1 on formalin-fixed paraffin-embedded human colon tissue. [antibody concentration 1 ug/ml]

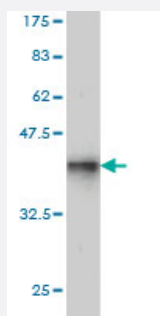
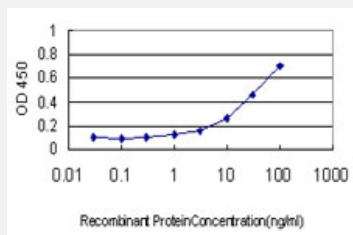


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SHMT1 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 1 ug/ml]

Sandwich ELISA (Recombinant protein)

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



Western Blot detection against Immunogen (37.73 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant SHMT1.
Immunogen	SHMT1 (NP_004160, 374 a.a. ~ 482 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	EKVL EACSIACNKNTCPGDRSALRPSGLRLGTPALT SRGLLEKDFQKVAHFH RGIELTLQIQSDTGVRATLKEFKERLAGDKYQAAVQALREEVESFASLFPLPGLPD
Host	Mouse
Reactivity	Human
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.73 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

SHMT1 monoclonal antibody (M01), clone 4F9 Western Blot analysis of SHMT1 expression in HeLa (Cat # L013V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of SHMT1 expression in transfected 293T cell line by SHMT1 monoclonal antibody (M01), clone 4F9.

Lane 1: SHMT1 transfected lysate(53.1 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SHMT1 on formalin-fixed paraffin-embedded human colon tissue. [antibody concentration 1 ug/ml]

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SHMT1 on formalin-fixed paraffin-embedded human placenta. [antibody concentration 1 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

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

[Protocol Download](#)

- ELISA

Gene Info — SHMT1

Entrez GeneID [6470](#)

GeneBank Accession# [NM_004169](#)

Protein Accession# [NP_004160](#)

Gene Name	SHMT1
Gene Alias	CSHMT, MGC15229, MGC24556, SHMT
Gene Description	serine hydroxymethyltransferase 1 (soluble)
Omim ID	182144
Gene Ontology	Hyperlink
Gene Summary	This gene encodes the cellular 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. Alternative splicing of this gene results in 2 transcript variants encoding 2 different isoforms. Additional transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq]
Other Designations	14 kDa protein cytoplasmic serine hydroxymethyltransferase

Publication Reference

- [Mass spectrometric/bioinformatic identification of a protein subset that characterizes the cellular activity of anticancer peptides.](#)

Genovese F, Gualandi A, Taddia L, Marverti G, Pirondi S, Marraccini C, Perco P, Pela M, Guerrini R, Amoroso MR, Esposito F, Martello A, Ponterini G.

The Journal of Proteome Research 2014 Nov; 13(11):5250.

Application: WB-Ce, Human, CSD-OC, A2780/CP, IGROV-1 cells

Pathway

- [Cyanoamino acid metabolism](#)
- [Glycine](#)
- [Metabolic pathways](#)
- [Methane metabolism](#)
- [One carbon pool by folate](#)

Disease

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- [Adenoma](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Autistic Disorder](#)
- [Bone Neoplasms](#)
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- [Urinary Bladder Neoplasms](#)
- [Vitamin B 12 Deficiency](#)

- [Werner syndrome](#)