

Product datasheet for **CF808813**

SHMT2 Mouse Monoclonal Antibody [Clone ID: OTI1E12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1E12
Applications:	IHC, WB
Recommended Dilution:	WB 1:500~2000, IHC 1:500
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human SHMT2(NP_005403) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	52.5 kDa
Gene Name:	serine hydroxymethyltransferase 2
Database Link:	NP_005403 Entrez Gene 108037 MouseEntrez Gene 299857 RatEntrez Gene 6472 Human P34897



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Background:

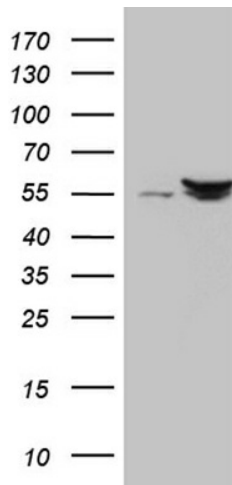
This gene encodes the mitochondrial form of a pyridoxal phosphate-dependent enzyme that catalyzes the reversible reaction of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. The encoded product is primarily responsible for glycine synthesis. The activity of the encoded protein 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]

Synonyms:

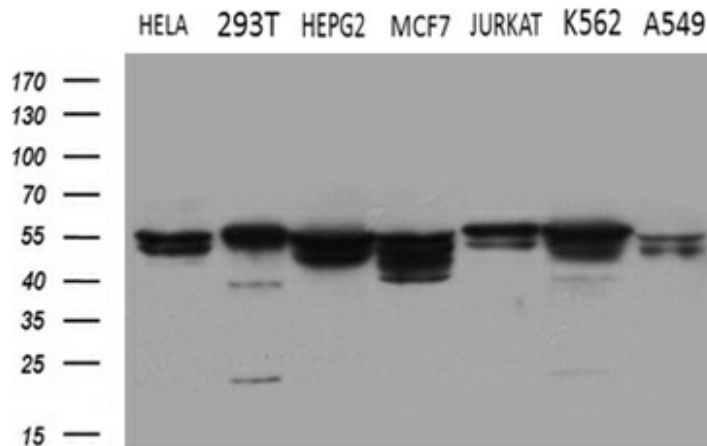
GLYA; HEL-S-51e; NEDCASB; SHMT

Protein Pathways:

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

Product images:


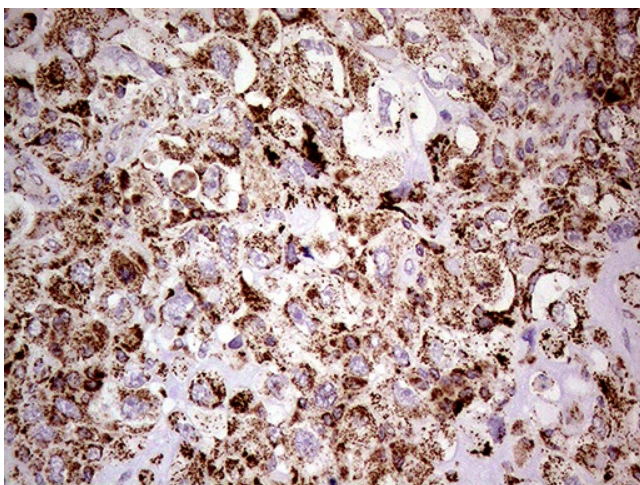
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SHMT2 ([RC204239], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SHMT2 (1:2000). Positive lysates [LY401661] (100ug) and [LC401661] (20ug) can be purchased separately from OriGene.



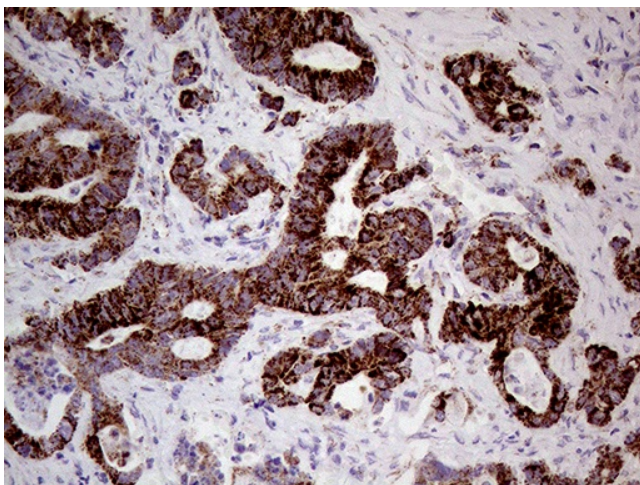
Western blot analysis of extracts (35ug) from 7 different cell lines by using anti-SHMT2 monoclonal antibody (1:500).



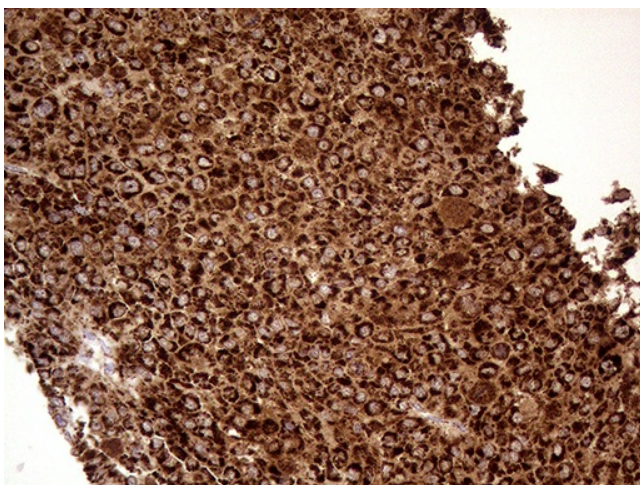
Immunohistochemical staining of paraffin-embedded Human breast tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



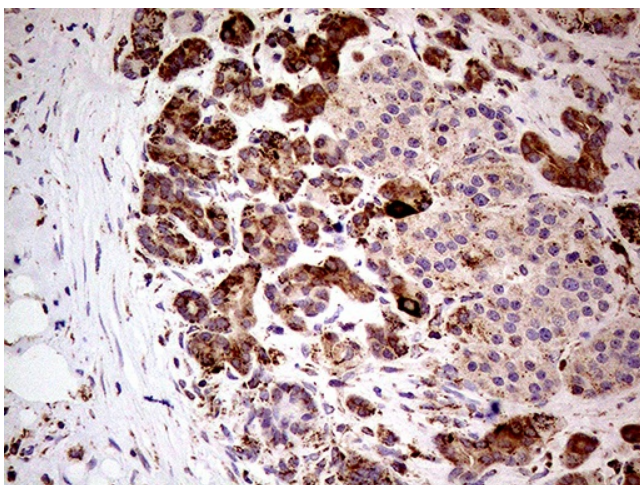
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue tissue using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



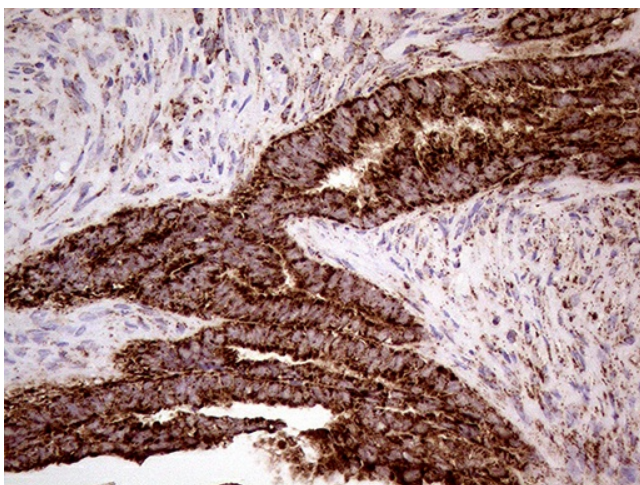
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



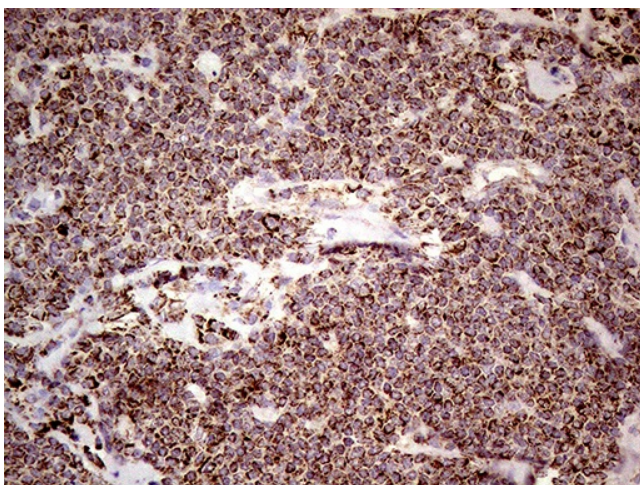
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-SHMT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.