

OriGene Technologies, Inc.

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Product datasheet for TA808813

SHMT2 Mouse Monoclonal Antibody [Clone ID: OTI1E12]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1E12
Applications: IHC, WB

Recommend Dilution: WB 1:500~2000, IHC 1:500

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human SHMT2(NP_005403) produced in E.coli.

Formulation: PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 52.5 kDa

Gene Name: serine hydroxymethyltransferase 2

Database Link: NP 005403 Entrez Gene 6472 Human

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; SHMT

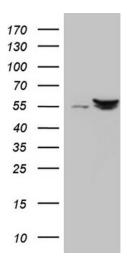
Protein Pathways: Cyanoamino acid metabolism, Glycine, serine and threonine metabolism, Metabolic

pathways, Methane metabolism, One carbon pool by folate

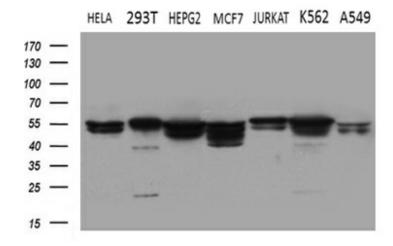




Product images:



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.

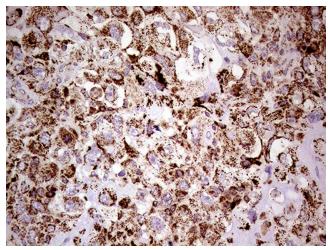


Western blot analysis of extracts (35ug) from 7 different cell lines by using anti-SHMT2 monoclonal antibody (1:500).

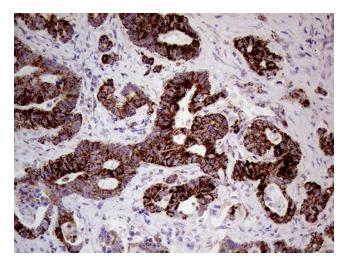




Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue tissue using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)

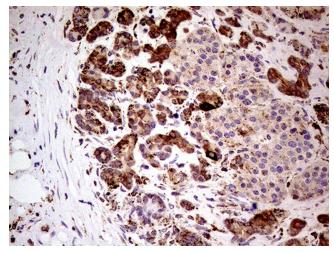


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)





Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)

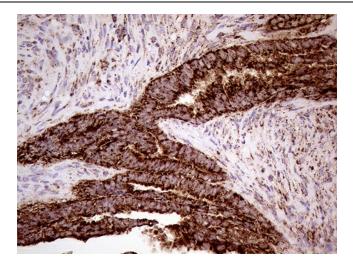


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)

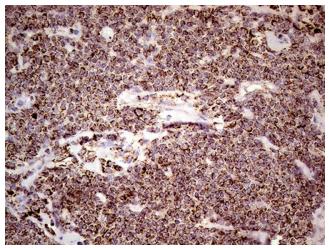


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)





Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)



Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-SHMT2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, TA808813) (1:500)