

SHMT2 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Recombinant protein fragment corresponding to a region within amino acids 1 and 483 of Human SHMT2
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7, with 20% glycerol
Contains	0.01% thimerosal
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2549701

Applications	Tested Dilution	Publications
Western Blot (WB)	1:5,000-1:20,000	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000	-
Immunocytochemistry (ICC/IF)	1:100-1:1,000	1 Publication

Product Specific Information

Recommended positive controls: 293T, HeLa, A431, HepG2.

Predicted reactivity: Mouse (93%), Rat (91%), Xenopus laevis (81%), Rabbit (93%), Bovine (92%).

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Product Images For SHMT2 Polyclonal Antibody

SHMT2 Antibody (PA5-32228) in WB

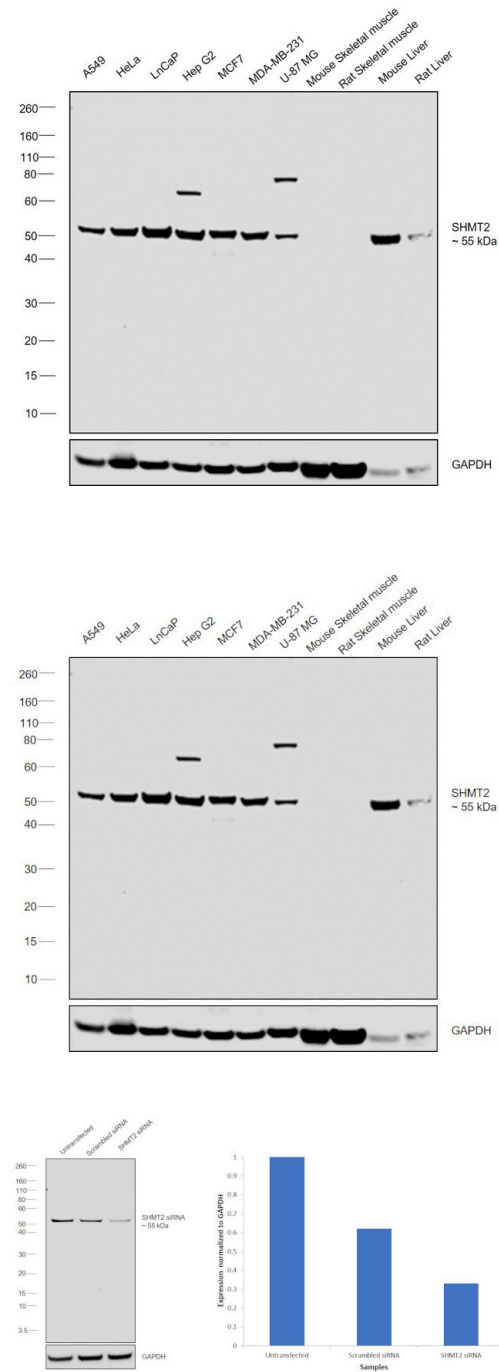
Western blot was performed using Anti-SHMT2 Polyclonal Antibody (Product # PA5-32228) and a 55 kDa band corresponding to Serine hydroxymethyltransferase, mitochondrial was observed across the cell lines and tissues tested. Whole cell extracts (30 µg lysate) of A549 (Lane 1), HeLa (Lane 2), LNCaP (Lane 3), Hep G2 (Lane 4), MCF7 (Lane 5), MDA-MB-231 (Lane 6), U-87 MG (Lane 7), Mouse Skeletal Muscle (Lane 8), Rat Skeletal Muscle (Lane 9), Mouse Liver (Lane 10), Rat Liver (Lane 11) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:5000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:10,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).

SHMT2 Antibody (PA5-32228)

Antibody specificity was demonstrated by detection of differential basal expression of the target across the cell lines and tissues tested owing to their inherent genetic constitution. Relative expression of Serine hydroxymethyltransferase, mitochondrial was observed in Mouse and Rat Liver as compared to Mouse and Rat Skeletal muscle using Anti-SHMT2 Polyclonal Antibody (Product # PA5-32228) in Western Blot. {RE}

SHMT2 Antibody (PA5-32228)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Hep G2 cells were transfected with Serine hydroxymethyltransferase, mitochondrial siRNA and decrease in signal intensity was observed in Western Blot application using Anti-SHMT2 Polyclonal Antibody (Product # PA5-32228). {KD}



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Western Blot (1)

eLife	Year 2016
Mitochondrial dysfunction remodels one-carbon metabolism in human cells.	
"Published figure using SHMT2 polyclonal antibody (Product # PA5-32228) in Western Blot"	
Authors: Bao XR,Ong SE,Goldberger O,Peng J,Sharma R,Thompson DA,Vafai SB,Cox AG,Marutani E,Ichinose F,Goessling W,Regev A,Carr SA,Clish CB,Mootha VK	

Immunocytochemistry (1)

Cells	Year 2019
Shmt2: A Stat3 Signaling New Player in Prostate Cancer Energy Metabolism.	
"PA5-32228 was used in Immunocytochemistry-immunofluorescence to demonstrate that in LNCaP, prostate cancer cells' SHMT2 expression is upregulated by the JAK2/STAT3 canonical pathway upon IL-6 stimulation."	
Authors: Marrocco I,Altieri F,Rubini E,Paglia G,Chichiarelli S,Giamogante F,Macone A,Perugia G,Magliocca FM,Gurtner A,Maras B,Ragno R,Patsilnakos A,Manganaro R,Eufemi M	
	Species Human
	Dilution 1:200

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