info@arigobio.com

ARG41736
anti-SHMT2 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SHMT2
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SHMT2
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 265-504 of Human SHMT2 (NP_005403.2).
Conjugation	Un-conjugated
Alternate Names	EC 2.1.2.1; SHMT; GLYA; Serine methylase; Glycine hydroxymethyltransferase; HEL-S-51e; Serine hydroxymethyltransferase, mitochondrial

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa
Observed Size	~ 56 kDa

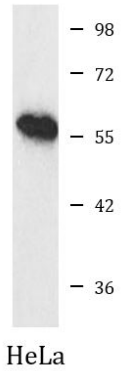
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	SHMT2
Gene Full Name	serine hydroxymethyltransferase 2 (mitochondrial)
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]
Function	Contributes to the de novo mitochondrial thymidylate biosynthesis pathway. Required to prevent uracil accumulation in mtDNA. Interconversion of serine and glycine. Associates with mitochondrial DNA. [UniProt]
Calculated Mw	56 kDa
Cellular Localization	Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid. Mitochondrion inner membrane. Cytoplasm. Nucleus. Note=Mainly localizes in the mitochondrion. Also found in the cytoplasm and nucleus as part of the BRISC complex (PubMed:24075985). [UniProt]

Images



ARG41736 anti-SHMT2 antibody WB image

Western blot: 25 µg of HeLa cell lysate stained with ARG41736 anti-SHMT2 antibody at 1:1000 dilution.