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MOSC2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8688B

Specification

MOSC2 Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q969Z3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**38023**
Antigen Region	**270-300**

MOSC2 Antibody (C-term) - Additional Information

Gene ID 54996

Other Names
Mitochondrial amidoxime reducing component 2, mARC2, 1---, Molybdenum cofactor sulfurase C-terminal domain-containing protein 2, MOSC domain-containing protein 2, Moco sulfurase C-terminal domain-containing protein 2, MARC2, MOSC2

Target/Specificity
This MOSC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 270-300 amino acids from the C-terminal region of human MOSC2.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MOSC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MOSC2 Antibody (C-term) - Protein Information

Name MTARC2 (HGNC:26064)

Synonyms MARC2, MOSC2

Function Catalyzes the reduction of N-oxygenated molecules, acting as a counterpart of cytochrome P450 and flavin-containing monooxygenases in metabolic cycles (PubMed:21029045, PubMed:24423752). As a component of prodrug-converting system, reduces a multitude of N-hydroxylated prodrugs particularly amidoximes, leading to increased drug bioavailability (PubMed:21029045, PubMed:24423752). May be involved in mitochondrial N(omega)-hydroxy-L-arginine (NOHA) reduction, regulating endogenous nitric oxide levels and biosynthesis (PubMed:21029045). Postulated to cleave the N-OH bond of N-hydroxylated substrates in concert with electron transfer from NADH to cytochrome b5 reductase then to cytochrome b5, the ultimate electron donor that primes the active site for substrate reduction (PubMed:21029045).

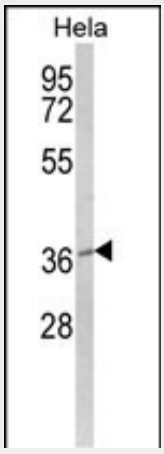
Cellular Location
Mitochondrion outer membrane; Peripheral membrane protein. Peroxisome

MOSC2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

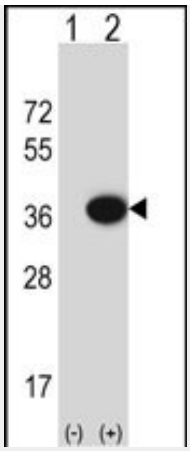
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MOSC2 Antibody (C-term) - Images

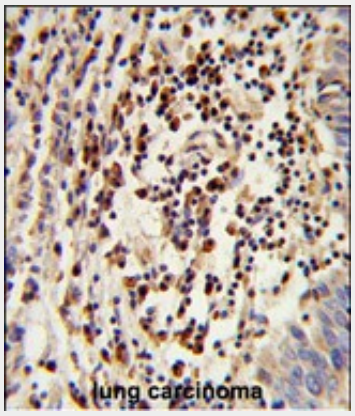


Western blot analysis of MOSC2 Antibody (C-term) (Cat. #AP8688b) in Hela cell line lysates (35ug/lane). MOSC2 (arrow) was detected using the purified Pab.

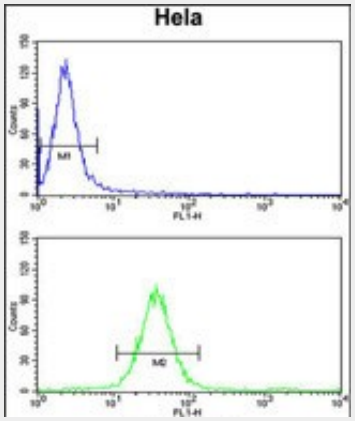
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Western blot analysis of MOSC2 (arrow) using rabbit polyclonal MOSC2 Antibody (C-term) (Cat. #AP8688b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MOSC2 gene.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with MOSC2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



MOSC2 Antibody (C-term) (Cat.#AP8688b) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MOSC2 Antibody (C-term) - Background

Catalytic component of the benzamidoxime prodrug-converting complex, a complex required to

reduce N-hydroxylated structures, such as benzamidoxime prodrug. Benzamidoxime is an amidine prodrug produced by N-hydroxylation which is used to enhance bioavailability and increase intestinal absorption. It is then reduced into benzamidine, its active amidine, by the benzamidoxime prodrug-converting complex.

MOSC2 Antibody (C-term) - References

Havemeyer,A., et.al., J. Biol. Chem. 281 (46), 34796-34802 (2006)
Simpson,J.C., et.al.,EMBO Rep. 1 (3), 287-292 (2000)