

**MOSC2 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8688B**

**Specification**

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**MOSC2 Antibody (C-term) - Product Information**

Application	WB, FC, IHC-P,E
Primary Accession	<a href="#">Q969Z3</a>
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  
FC~~1:10~50  
IHC-P~~1:50~100  
E~~Use at an assay dependent concentration.

**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**

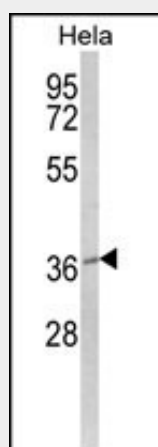
Mitochondrion outer membrane; Peripheral membrane protein. Peroxisome

**MOSC2 Antibody (C-term) - Protocols**

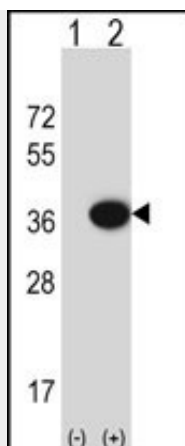
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

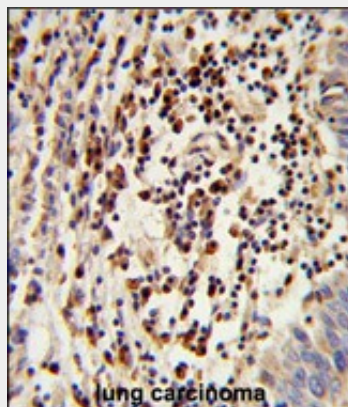
**MOSC2 Antibody (C-term) - Images**



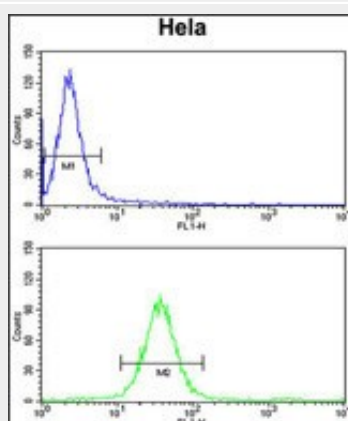
Western blot analysis of MOSC2 Antibody (C-term) (Cat. #AP8688b) in HeLa cell line lysates (35ug/lane). MOSC2 (arrow) was detected using the purified Pab.



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)