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MOSC2 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13573b

Specification

MOSC2 Antibody (C-term) Blocking peptide - Product Information

Primary Accession Q969Z3

MOSC2 Antibody (C-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP13573b was selected from the C-term region of MOSC2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MOSC2 Antibody (C-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- Blocking Peptides

MOSC2 Antibody (C-term) Blocking peptide - Images

MOSC2 Antibody (C-term) Blocking peptide - 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) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Aberg, K., et al. Biol. Psychiatry 67(3):279-282(2010)Havemeyer, A., et al. J. Biol. Chem. 281(46):34796-34802(2006)Anantharaman, V., et al. FEMS Microbiol. Lett. 207(1):55-61(2002)Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)