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CKMT1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7071a

Specification

CKMT1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P12532

CKMT1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1159;548596

Other Names
Creatine kinase U-type, mitochondrial, Acidic-type mitochondrial creatine kinase, Mia-CK, Ubiquitous mitochondrial creatine kinase, U-MtCK, CKMT1A, CKMT

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7071a was selected from the N-term region of human CKMT1. 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.

CKMT1 Antibody (N-term) Blocking Peptide - Protein Information

Name CKMT1A

Synonyms CKMT

Function
Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

Cellular Location
Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side

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CKMT1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CKMT1 Antibody (N-term) Blocking Peptide - Images

CKMT1 Antibody (N-term) Blocking Peptide - Background

Mitochondrial creatine kinase (MtCK) is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate genes. Mitochondrial creatine kinase occurs in two different oligomeric forms: dimers and octamers, in contrast to the exclusively dimeric cytosolic creatine kinase isoenzymes. Many malignant cancers with poor prognosis have shown overexpression of ubiquitous mitochondrial creatine kinase, this may be related to high energy turnover and failure to eliminate cancer cells via apoptosis. Ubiquitous mitochondrial creatine kinase has 80% homology with the coding exons of sarcomeric mitochondrial creatine kinase.