

# **CKMT1 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7071a

## **Specification**

# CKMT1 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P12532

Other Accession <u>P25809</u>, <u>Q29577</u>, <u>P30275</u>, <u>Q9TTK8</u>

Reactivity Human, Mouse Predicted Bovine, Pig, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 55-84

## CKMT1 Antibody (N-term) - 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

This CKMT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-84 amino acids from the N-terminal region of human CKMT1.

## **Dilution**

WB~~1:1000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### **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**

CKMT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CKMT1 Antibody (N-term) - 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**

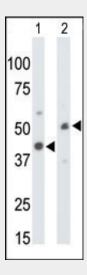
Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side

#### **CKMT1 Antibody (N-term) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# CKMT1 Antibody (N-term) - Images



The anti-CKMT1 Pab (Cat. #AP7071a) is used in Western blot to detect CKMT1 in mouse colon tissue lysate (Lane 1) and ZR-75-1 cell lysate (Lane 2).

# CKMT1 Antibody (N-term) - 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.