

## **CKMT2 Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7072b

## **Specification**

## CKMT2 Antibody (C-term) - Product Information

Application WB.E **Primary Accession** P17540 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG 47504 Calculated MW Antigen Region 391-419

## CKMT2 Antibody (C-term) - Additional Information

### **Gene ID 1160**

## **Other Names**

Creatine kinase S-type, mitochondrial, Basic-type mitochondrial creatine kinase, Mib-CK, Sarcomeric mitochondrial creatine kinase, S-MtCK, CKMT2

## Target/Specificity

This CKMT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-419 amino acids from the C-terminal region of human CKMT2.

# **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**

CKMT2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CKMT2 Antibody (C-term) - Protein Information

## Name CKMT2

**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

#### **Tissue Location**

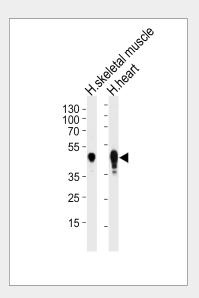
Sarcomere-specific. Found only in heart and skeletal muscles

## CKMT2 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

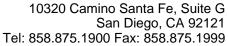
## CKMT2 Antibody (C-term) - Images

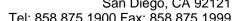


Western blot analysis of lysates from human skeletal muscle and heart tissue lysates (from left to right), using CKMT2 Antibody (D406)(Cat. #AP7072b). AP7072b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

# CKMT2 Antibody (C-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. Sarcomeric mitochondrial creatine kinase has 80% homology with the coding exons of ubiquitous mitochondrial creatine







kinase. This gene contains sequences homologous to several motifs that are shared among some nuclear genes encoding mitochondrial proteins and thus may be essential for the coordinated activation of these genes during mitochondrial biogenesis.