

# CKMT2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7072b

#### **Product Information**

**Application** WB, E **Primary Accession** P17540 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB5385/5386 **Calculated MW** 47504 **Antigen Region** 391-419

#### **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 E~~Use at an assay dependent concentration.

**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.

#### **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;

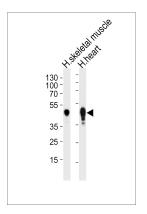
Intermembrane side

**Tissue Location** Sarcomere-specific. Found only in heart and skeletal muscles

## **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.

### **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.

 $Please\ note: All\ products\ are\ 'FOR\ RESEARCH\ USE\ ONLY.\ NOT\ FOR\ USE\ IN\ DIAGNOSTIC\ OR\ THERAPEUTIC\ PROCEDURES'.$