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CKMT2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7072a

Product Information

Application	WB, E
Primary Accession	P17540
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5383/5384
Calculated MW	47504
Antigen Region	56-86

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 56-86 amino acids from the N-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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

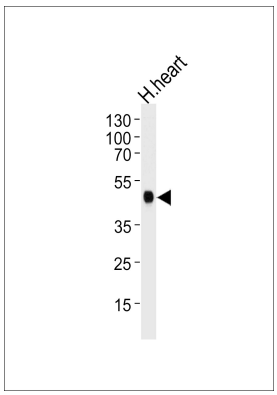
Name	CKMT2
Function	Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

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 lysate from human heart tissue lysate, using CKMT2 Antibody (A71)(Cat. #AP7072a). AP7072a 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. Lysate at 35ug per lane.