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CKMT1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7071a

Product Information

Application	WB, E
Primary Accession	P12532
Other Accession	P25809, Q29577, P30275, Q9TTK8
Reactivity	Human, Mouse
Predicted	Bovine, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5397/5398
Calculated MW	47037
Antigen Region	55-84

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

Protein Information

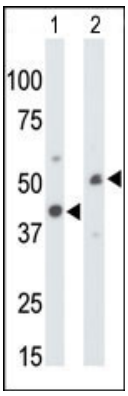
Name	CKMT1A
Synonyms	CKMT

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

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.

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).