10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CKMT2 Antibody

Catalog # AP59987

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P17540
Reactivity	Human, Mouse, Rat, Pig, Chicken, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47504

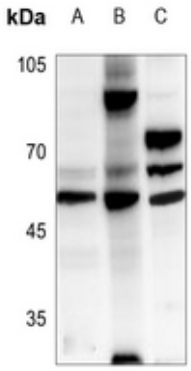
Additional Information

Gene ID	1160
Other Names	Creatine kinase S-type mitochondrial; Basic-type mitochondrial creatine kinase; Mib-CK; Sarcomeric mitochondrial creatine kinase; S-MtCK
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CKMT2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

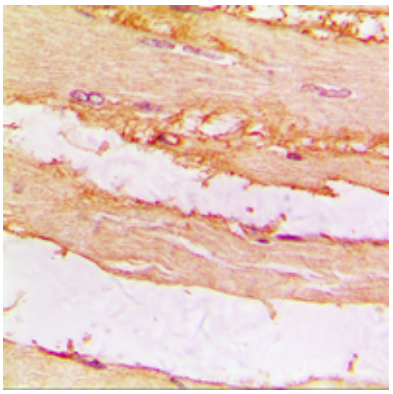
Protein Information

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

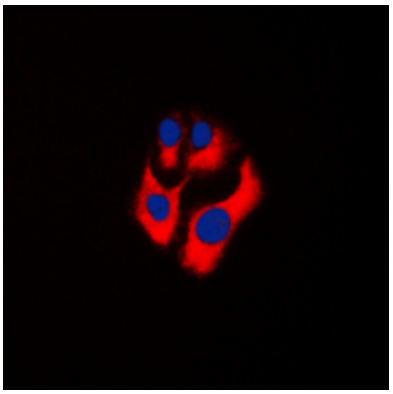
Images



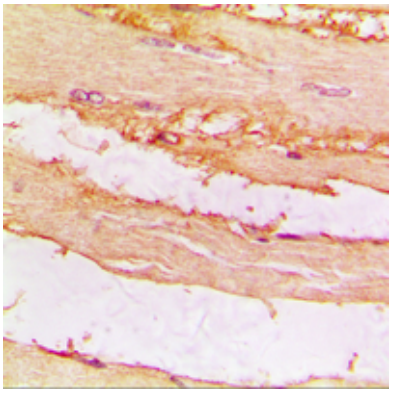
Western blot analysis of CKMT2 expression in mouse heart (A), rat kidney (B), rat heart (C) whole cell lysates. (Predicted band size: 47 kD; Observed band size: 48 kD)



Immunohistochemical analysis of CKMT2 staining in human muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CKMT2 staining in THP1 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of CKMT2 staining in human muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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