

sMtCK rabbit pAb**Cat#: orb766344 (Manual)**

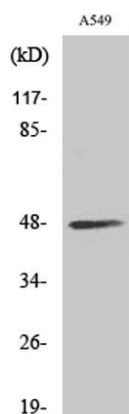
For research use only. Not intended for diagnostic use.

Product Name	sMtCK rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human CKMT2. AA range:231-280
Specificity	sMtCK Polyclonal Antibody detects endogenous levels of sMtCK protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Creatine kinase S-type mitochondrial
Gene Name	CKMT2
Cellular localization	Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal

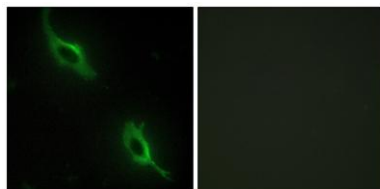
Concentration	1 mg/ml
Observed band	48kD
Human Gene ID	1160
Human Swiss-Prot Number	P17540
Alternative Names	CKMT2; Creatine kinase S-type; mitochondrial; Basic-type mitochondrial creatine kinase; Mib-CK; Sarcomeric mitochondrial creatine kinase; S-MtCK

Background

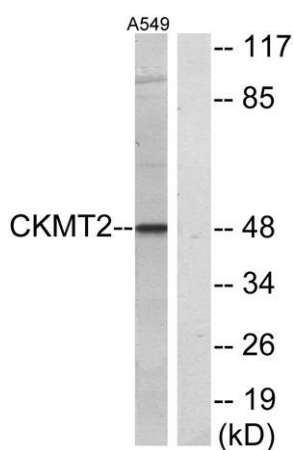
creatine kinase, mitochondrial 2(CKMT2) Homo sapiens Mitochondrial creatine kinase (MtCK) is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and 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. Three transcript variants encoding the same protein have been found for this gen



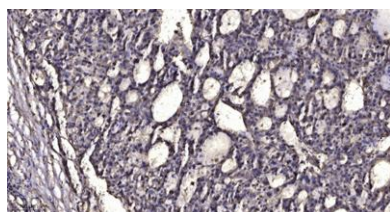
Western Blot analysis of various cells using sMtCK Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using CKMT2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A549 cells, using CKMT2 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).