Best Tools for immunology Research

CKMT1 mouse mAb

Catalog No :	YM1317
Reactivity :	Human;Mouse
Applications :	WB
Target :	CKMT1
Fields :	>>Arginine and proline metabolism;>>Metabolic pathways
Gene Name :	ckmt1b
Human Gene Id :	1159
Human Swiss Prot No :	P12532
Mouse Swiss Prot No :	P30275
Immunogen :	Purified recombinant human CKMT1 protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of CKMT1 and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	47kD

Cell Pathway : Arginine and proline metabolism;

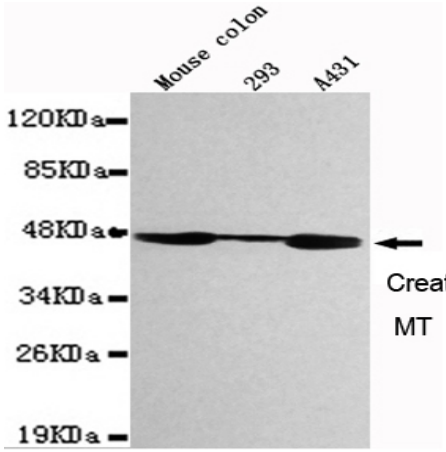
Background : Mitochondrial creatine (MtCK) kinase is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate genes. 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. Two genes located near each other on chromosome 15 have been identified which encode identical mi

Function : catalytic activity:ATP + creatine = ADP + phosphocreatine.,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.,miscellaneous:Mitochondrial creatine kinase binds cardiolipin.,similarity:Belongs to the ATP:guanido phosphotransferase family.,subunit:Exists as an octamer composed of four MTCK homodimers.,

Subcellular Location : Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side.

Expression : Cerebellum,Lung,PNS,

Products Images



Western blot detection of CKMT1 in Mouse Colon,293 and A431 cell lysates using CKMT1 mouse mAb (1:1000 diluted).Predicted band size:47KDa.Observed band size:47KDa.