

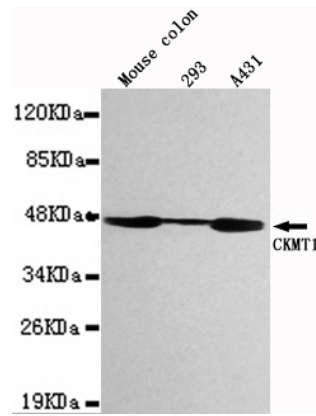


## CKMT1 Antibody

E2200627

- Catalog Number:** E2200627
- Size:** 100ug
- Host:** Mouse
- Formulation:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol
- Sensitivity:** This antibody detects endogenous levels of CKMT1 and does not cross-react with related proteins.
- Entrez summary:** 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 mitochondrial creatine kinase proteins.
- UniPort summary**
- 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.
- Immunogen:** Purified recombinant human CKMT1 protein fragments expressed in E.coli.
- Antibody Type:** Monoclonal antibody
- Isotype:** IgG1
- Purified method:** Affinity purified
- Subcellular location:** Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side.
- Reactivity:** H.M
- Applications:** WB
- Molecular Weight:** 47kDa
- UniProt number:** P12532
- GeneBank ID:** NM\_020990.3
- Gene symbol:** CKMT; CKMT1; UMTCK; CKMT1A
- Alternate names:** Acidic-type mitochondrial creatine kinase Short name=Mia-CK Ubiquitous mitochondrial creatine kinase Short name=U-MtCK

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