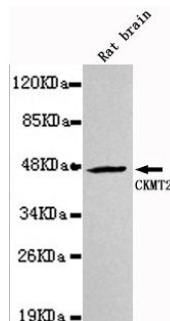




CKMT2

Mouse monoclonal Antibody

#53521

Catalog Number: 53521**Amount:** 100µg/100µl**Swiss-Prot No. :** P17540**Gene name:** ckmt2**Gene id:** 1160**Clone Number:** 3F4-G5-H5**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol**Storage/Stability:** Store at -20°C/1 year**Immunogen:** Purified recombinant human CKMT2 protein fragments expressed in E.coli**Purification:** affinity-chromatography**Specificity/Sensitivity:** This antibody detects endogenous levels of CKMT2 and does not cross-react with related proteins**Reactivity:** Rat**Applications:** Predicted MW: 47kd WB: 1:1000

Western blot detection of CKMT2 in Rat Brain lysates using CKMT2 mouse mAb (1:1000 diluted). Predicted band size: 47KDa. Observed band size: 47KDa.

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. 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 gene.