



# Recombinant Rabbit Creatine kinase S-type, mitochondrial (CKMT2)

<b>Product Code</b>	CSB-EP005462RB
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	O77814
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Oryctolagus cuniculus (Rabbit)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	E ARDQHKLFPF SADYPDLRKH NNCMAECLTP SIYAKLRNKV TANGYTLDQC IQTGVDNPGH PFIKTVGMVA GDEESYEVFA DLFDPVIKLR HNGYDPRVMK HPTDL DASKI TQGQFDERYV LSSRVRTGRS IRGLSLPPAC SRAEAREVEN VAITALEGLK GDLAGRYRYL SEMTEQDQQR LIDDHFLFDK PVSPLLTCAG MARDWPDARG IWHNYDNTFL IWINEEDHTR VISMEKGGNM KRVFERFCRG LKEVERLIQE RGWEFMWNER LGYILTCPSN LGTGLRAGVH VRIPKLSKDP RFSKILENLR LQKRGTGGVD TRAVADVYDI SNIDRIGRSE VELVQIVIDG VNYLVDCEKK LERGQDIKVP PPLPQFGKK
<b>Source</b>	E.coli
<b>Target Names</b>	CKMT2
<b>Protein Names</b>	Recommended name: Creatine kinase S-type, mitochondrial EC= 2.7.3.2 Alternative name(s): Basic-type mitochondrial creatine kinase Short name= Mib-CK RSMTCK Sarcomeric mitochondrial creatine kinase Short name= S-MtCK
<b>Expression Region</b>	40-419
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the



contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.