

## Product datasheet for TP324501M

### CKMT2 (NM\_001099735) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human creatine kinase, mitochondrial 2 (sarcomeric) (CKMT2), nuclear gene encoding mitochondrial protein, transcript variant 2, 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC224501 protein sequence Red=Cloning site Green=Tags(s)

MASIFSKLLTGRNASLLFATMGTSVLTTGYLLNRQKVCAEVREQPRLFPPSADYPDLRKHNNCMAECLTP  
AIYAKLRNKVTPNGYTLDQCIQTGVDNPGHPFIKTVGMVAGDEESYEVFADLFDVPVIKLRHNGYDPRVMK  
HTDLDASKITQGGFDEHYVLSRVRTGRSIRGLSLPPACTRAERREVENVAITALEGLKGDLAGRYK  
SEMTEQDQQLIDDHFLFDKPVSPLLTCAGMARDWPDARGIWHNYDKTFLIWINEDHTRVISMEEKGGM  
KRVFERFCRGLKEVERLIQERGWEFMWNERLGYILTCPNLGTGLRAGVHVRIKLSKDPFRFSKILENLR  
LQKRGTGGVDAAVADVDDISNIDRIGRSEVELVQIVIDGVNYLVDCEKKLERGQDIKVPPLPQFGKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	43.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_001093205</a>



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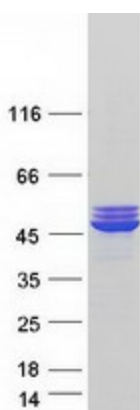
Locus ID: 1160  
UniProt ID: [P17540](#), [A0A024RAK5](#)  
RefSeq Size: 1486  
Cytogenetics: 5q14.1  
RefSeq ORF: 1257  
Synonyms: SMTCK

**Summary:** 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. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Arginine and proline metabolism, Metabolic pathways

### Product images:



Coomassie blue staining of purified CKMT2 protein (Cat# [TP324501]). The protein was produced from HEK293T cells transfected with CKMT2 cDNA clone (Cat# [RC224501]) using MegaTran 2.0 (Cat# [TT210002]).