

## Product datasheet for PH316991

### CKMT2 (NM\_001099736) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	CKMT2 MS Standard C13 and N15-labeled recombinant protein (NP_001093206)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC216991
Predicted MW:	47.5 kDa
Protein Sequence:	>RC216991 protein sequence Red=Cloning site Green=Tags(s)

MASIFSKLLTGRNASLLFATMGTSVLTTGYLLNRQKVC AEVREQPRLFPPSADYPDLRKHNNCMAECLTP  
AIYAKLRNKVTPNGYTL DQCIQTGVDNPGHPFIKTVGMVAGDEESYEVFADLFDPVIKLRHNGYDPRVMK  
HTDLDASKITQGQFDEHYVLSRVRTGRSIRGLSLPPACTRAERREVENVAITALEGLKGDLAGRYK  
SEMTEQDQORLIDHFLFDKPVSPLLTCAGMARDWPDARGIWHNYDKTFLIWINEEDHTRVISMEKGGNM  
KRVFERFCRGLKEVERLIQERGWEFMMNERLGYILTCPSNLGTGLRAGVHVRIPKLSKDPFRFSKILENLR  
LQKRGTGGVDTAAVADVVDISNIDRIGRSEVELVQIVIDGVNYLVDCEKKLERGQDIKVPPLPQFGKK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_001093206</u>
RefSeq Size:	1490
RefSeq ORF:	1257
Synonyms:	SMTCK
Locus ID:	1160



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UniProt ID: [P17540](#), [A0A024RAK5](#)

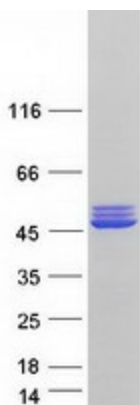
Cytogenetics: 5q14.1

**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# [TP316991]). The protein was produced from HEK293T cells transfected with CKMT2 cDNA clone (Cat# [RC216991]) using MegaTran 2.0 (Cat# [TT210002]).