Recombinant Human CKMT2 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. CKMT2-2979H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	CKMT2 MS Standard C13 and N15-labeled recombinant protein (NP_001093205) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	47.5 kDa
AA Sequence	MASIFSKLLTGRNASLLFATMGTSVLTTGYLLNRQKVCAEVREQPRLFPPSADYPDL

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	RKHNNCMAECLTPAIYAKLRNKVTPNGYTLDQCIQTGVDNPGHPFIKTVGMVAGDE ESYEVFADLFDPVIKLRHNGYDPRVMKHTTDLDASKITQGQFDEHYVLSSRVRTGRS IRGLSLPPACTRAERREVENVAITALEGLKGDLAGRYYKLSEMTEQDQQRLIDDHFLF DKPVSPLLTCAGMARDWPDARGIWHNYDKTFLIWINEEDHTRVISMEKGGNMKRVF ERFCRGLKEVERLIQERGWEFMWNERLGYILTCPSNLGTGLRAGVHVRIPKLSKDP RFSKILENLRLQKRGTGGVDTAAVADVYDISNIDRIGRSEVELVQIVIDGVNYLVDCEK KLERGQDIKVPPPLPQFGKKTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	CKMT2 creatine kinase, mitochondrial 2 [Homo sapiens (human)]
Official Symbol	CKMT2
Synonyms	CKMT2; creatine kinase, mitochondrial 2 (sarcomeric); creatine kinase S-type, mitochondrial; SMTCK; S-MtCK; mib-CK; basic-type mitochondrial creatine kinase; sarcomeric mitochondrial creatine kinase;
Gene ID	1160

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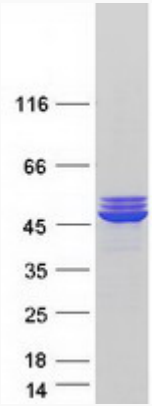
mRNA Refseq	NM_001099735
Protein Refseq	NP_001093205
MIM	123295
UniProt ID	P17540
SDS-PAGE	

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