

Product datasheet for PH312558

CKMT1B (NM_020990) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CKMT1B MS Standard C13 and N15-labeled recombinant protein (NP_066270)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC212558
Predicted MW:	47 kDa
Protein Sequence:	>RC212558 protein sequence Red=Cloning site Green=Tags(s)
	MAGPFSRLLSARPGRLRLLAGAGSLAAGFLLRPEPVRAASERRRLYPPSAEYPDLRKHNNCMASHLTPA VYARLCDKTTPTGWTLDQCIQTGVDPNGHPFIKTVGMVAGDEETYEYFADLFDPVIIQERHNGYDPRMTKH TTDL DASKIRSGYFDERYVLSRVRTGRSIRGLSLPPACTRAERREVERVVVDALSGLKGDLAGRYRSL EMTEAEQQQLIDDHFLFDKPVSPLLTAAGMARDWPDARGIWHNNEKSFLIWNNEEDHTRVISMEKGGNMK RVFERFCRGLKEVERLIQERGWEFMNERLGYILTCPSNLGTGLRAGVHIKPLLSKDSRFPKILENRL QKRGTGGVDTAATGGVFDISNLDRLGKSEVELVQLVIDGVNYLIDCERRLERGQDIRIPTPVIHTKH
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
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- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-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:	NP_066270
RefSeq Size:	1779
RefSeq ORF:	1251
Synonyms:	CKMT; CKMT1; UMTCK
Locus ID:	1159



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UniProt ID: [P12532](#)

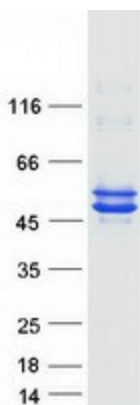
Cytogenetics: 15q15.3

Summary: Mitochondrial creatine (MtCK) kinase 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. Many malignant cancers with poor prognosis have shown overexpression of ubiquitous mitochondrial creatine kinase; this may be related to high energy turnover and failure to eliminate cancer cells via apoptosis. Ubiquitous mitochondrial creatine kinase has 80% homology with the coding exons of sarcomeric mitochondrial creatine kinase. Two genes located near each other on chromosome 15 have been identified which encode identical mitochondrial creatine kinase proteins. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome

Protein Pathways: Arginine and proline metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified CKMT1B protein (Cat# [TP312558]). The protein was produced from HEK293T cells transfected with CKMT1B cDNA clone (Cat# [RC212558]) using MegaTran 2.0 (Cat# [TT210002]).