

Product datasheet for **TP312558L**

CKMT1B (NM_020990) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human creatine kinase, mitochondrial 1B (CKMT1B), nuclear gene encoding mitochondrial protein, 1 mg

Species: Human

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC212558 protein sequence
Red=Cloning site **Green**=Tags(s)

MAGPFSRLLSARPGRLRLLAGAGSLAAGFLLRPEPVRAASERRRLLYPPSAEYDRLKHNNCMASHLTPA
VYARLCDKTTPTGWTLQCIQTGVDNPGHPFIKTVGMVAGDEETYEVFADLFDPIQERHNGYDPRMTKH
TTDLDAKIRSGYFDERYVLSSRVRTGRSIRGLSLPPACTRAERREVERVVDALSGLKGDLAGRYRSL
EMTEAEQQQLIDDHFLFDKPVSPLLTAAGMARDWPDARGIWHNNEKSFLIWWNEEDHTRVISMEEKGGNMK
RVFERFCRGLKEVERLIQERGWEFMWNERLGYILTCPSNLGTGLRAGVHIKPLLSKDSRFPKILENLRL
QKRGTGGVDTAATGGVFDISNLDRLGKSEVELVQLVIDGVNYLIDCERRLERGQDIRIPTPVIHTKH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 43 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: [NP_066270](#)



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Locus ID: 1159

UniProt ID: [P12532](#)

RefSeq Size: 1779

Cytogenetics: 15q15.3

RefSeq ORF: 1251

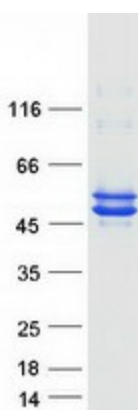
Synonyms: CKMT; CKMT1; UMTCK

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]).