

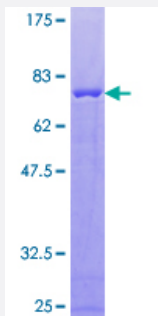
Full-Length

CKMT1B (Human) Recombinant Protein (P01)

Catalog # H00001159-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CKMT1B full-length ORF (NP_066270.1, 1 a.a. - 417 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAGPFSRLLSARPGRLRLLAGAGSLAAGFLLRPEPVRAASERRRLYPSSAEYPDLRKHNNCMA
SHLTPAVYARLCDKTTPTGWTLDDQCIQTGVDNPGHPFIKTVGMVAGDEETYEVFADLFDPIQER
HNGYDPRTMKHTTDLDAKIRSGYFDERYVLSSRVRTGRSIRGLSLPPACTRAERREVERVVVDA
LSGLKGDLAGRYRLSEMTEAEQQQLIDHFLDKPVSPLLTAAGMARDWPDARGMWHNNEKSF
LWVNEDHTRVISMEKGGNMKRVFERFCRGLKEVERLIQERGWEFMWNERLGYLTCPSNLGTG
LRAGVHIKLPLLSKDSRFPKILENLRLQKRGTGGVDTAATGGVFDISNLDRLGKSEVELVQLVIDGV
NYLIDCERRLERGQDIRIPTVVIHTKH

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

73.4

Interspecies Antigen Sequence

Mouse (97); Rat (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CKMT1B

Entrez GeneID	1159
GeneBank Accession#	NM_020990.3
Protein Accession#	NP_066270.1
Gene Name	CKMT1B
Gene Alias	CKMT, CKMT1, UMTCK
Gene Description	creatine kinase, mitochondrial 1B
Omim ID	123290
Gene Ontology	Hyperlink

Gene 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]
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Other Designations

OTTHUMP00000066275|acidic-type mitochondrial creatine kinase|creatine kinase, mitochondria
I 1 (ubiquitous)|ubiquitous mitochondrial creatine kinase

Pathway

- [Arginine and proline metabolism](#)
- [Metabolic pathways](#)