

Product datasheet for RC212558L4V

OriGene Technologies, Inc.

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CKMT1B (NM_020990) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: CKMT1B (NM_020990) Human Tagged ORF Clone Lentiviral Particle

Symbol: CKMT1B

Synonyms: CKMT; CKMT1; UMTCK

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_020990 **ORF Size:** 1251 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC212558).

OTI Disclaimer:

Sequence:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeg: NM 020990.3

 RefSeq Size:
 1779 bp

 RefSeq ORF:
 1254 bp

 Locus ID:
 1159

 UniProt ID:
 P12532

 Cytogenetics:
 15q15.3

Domains: ATP-gua_Ptrans

Protein Families: Druggable Genome





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Protein Pathways: Arginine and proline metabolism, Metabolic pathways

MW: 47 kDa

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, Jul 2008]