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Product datasheet for SC321700

CKMT2 (NM_001825) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CKMT2 (NM_001825) Human Untagged Clone
Tag:	Tag Free
Symbol:	CKMT2
Synonyms:	SMTCK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_001825.1

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GTGTGCGCTCAGCAGGACGTGGGAGGCTCCGGCTTCAAGACACTCATCCAAGAGGAAGGA
TGGCCAGTATCTTTTCTAAGTTGCTAACTGGCCGCAATGCTTCTCTGCTGTTTGCTACCA
TGGGCACCAGTGTCCTGACCACCGGGTACCTGCTGAACCGGCAGAAAGTGTGTGCCGAGG
TCCGGGAGCAGCCTAGGCTATTTCCTCCAAGCGCAGACTACCCAGACCTGCGCAAGCACA
ACAACTGCATGGCCGAGTGCCTCACCCCCGCCATTTATGCCAAGCTTCGCAACAAGGTGA
CACCCAACGGCTACACGCTGGACCAGTGCATCCAGACTGGAGTGGACAACCCTGGCCACC
CCTTCATAAAGACTGTGGGCATGGTGGCTGGTGACGAGGAGTCCTATGAGGTGTTTGCTG
ACCTTTTTGACCCCGTCATCAAACTAAGACACAACGGCTATGACCCCAGGGTGATGAAGC
ACACAACGGATCTGGATGCATCAAAGATCACCCAAGGGCAGTTCGACGAGCATTACGTGC
TGTCTTCTCGGGTGCGCACTGGCCGCAGCATCCGTGGGCTGAGCCTGCCTCCAGCCTGCA
CCCGGGCCGAGCGAAGGGAGGTAGAGAACGTGGCCATCACTGCCCTGGAGGGCCTCAAGG
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TCATCGATGACCACTTTCTGTTTGATAAGCCAGTGTCCCCTTTATTAACATGTGCTGGGA
TGGCCCGTGACTGGCCAGATGCCAGGGGAATCTGGCATAATTATGATAAGACATTTCTCA
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AACGAGTATTTGAGCGATTCTGTCGTGGACTAAAAGAAGTAGAACGGTTAATCCAAGAAC
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TTGGAACAGGACTACGAGCTGGTGTCCACGTTAGGATCCCAAAGCTCAGCAAGGACCCAC
GCTTTTCTAAGATCCTGGAAAACCTAAGACTCCAGAAGCGTGGCACAGGTGGTGTGGACA
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TCTGAGAGTTTTTATACACTTGGAAAAATATAAAATTGTAGATCCTGCCTATCTTTACAA
TAAAACTCTCCTTAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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View online »

Restriction Sites:	Please inquire
ACCN:	NM_001825
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001825.1, NP_001816.1
RefSeq Size:	1597 bp
RefSeq ORF:	1260 bp
Locus ID:	1160
UniProt ID:	P17540
Cytogenetics:	5q14.1
Domains:	ATP-gua_Ptrans
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways

Gene Summary: 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. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1) represents the longest transcript. All three variants encode the same protein.