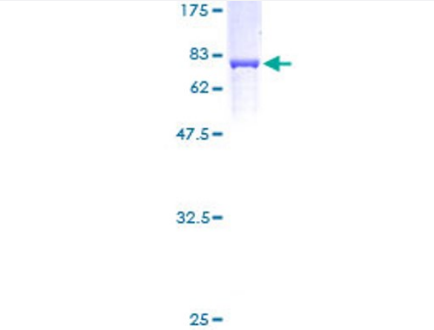
Full-Length

CKMT2 (Human) Recombinant Protein (P01)

Catalog # H00001160-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CKMT2 full-length ORF (AAH29140, 1 a.a. - 419 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MASIFSKLLTGRNASLLFATMGTSVLTTGYLLNRQKVCAEVREQPRLFPPSADYPDLRKHNNCMA ECLTPAIYAKLRNKVTPNGYTLDQCIQTGVDNPGHPFIKTVGMVAGDEESYEVFADLFDPVIKLRHN GYDPRVMKHTTDLDASKITQGQFDEHYVLSSRVRTGRSIRGLSLPPACTRAERREVENVAITALEG LKGDLAGRYYKLSEMTEQDQQRLIDDHFLFDKPVSPLLTCAGMARDWPDARGIWHNYDKTFLIWI NEEDHTRVISMEKGGNMKRVFERFCRGLKEVERLIQERGWEFMWNERLGYILTCPSNLGTGLRA GVHVRIPKLSKDPRFSKILENLRLQKRGTGGVDTAAVADVYDISNIDRIGRSEVELVQIVIDGVNYLV DCEKKLERGQDIKVPPPLPQFGKK
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	71.83
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 — CKMT2

Entrez GeneID	1160
GeneBank Accession#	BC029140
Protein Accession#	AAH29140
Gene Name	CKMT2
Gene Alias	SMTCK
Gene Description	creatine kinase, mitochondrial 2 (sarcomeric)
Omim ID	123295
Gene Ontology	Hyperlink
Gene Summary	Mitochondrial creatine kinase (MtCK) is responsible for the transfer of high energy phosphate fro m mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme famil y. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate gen es. Mitochondrial creatine kinase occurs in two different oligomeric forms: dimers and octamers, i n contrast to the exclusively dimeric cytosolic creatine kinase isoenzymes. Sarcomeric mitochond rial 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 som e nuclear genes encoding mitochondrial proteins and thus may be essential for the coordinated a ctivation of these genes during mitochondrial biogenesis. Three transcript variants encoding the s ame protein have been found for this gene. [provided by RefSeq
Other Designations	OTTHUMP00000147542|basic-type mitochondrial creatine kinase|sarcomeric mitochondrial crea tine kinase

Pathway

- Arginine and proline metabolism
- Metabolic pathways