

AR50423PU-N

Human CKMT2 (40-419, His-tag) - Purified

Alternate names:

Basic-type mitochondrial creatine kinase, Creatine kinase S, Mib-CK, S-MtCK, sarcomeric mitochondrial Creatine kinase

Quantity:

0.5 mg

Concentration:

1mg/ml (determined by Bradford assay)

Background:

CKMT2, as known as SMTCK, belongs to the ATP:guanido phosphotransferase family. SMTCK is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. This enzyme reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

Uniprot ID:

[P17540](#)

NCBI:

[NP_001093205](#)

GenelD:

[1160](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer, pH8.0, 10% glycerol, 1mM DTT, 100mM NaCl

Description:

Recombinant human CKMT2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGSMEVREQ PRLFPPSADY PDLRKHNCM AECLTPAIYA
KLRNKVTPNG YTLDQCIQTG VDNPGHPFIK TVGMVAGDEE SYEVFADLFD PVIKLRHNGY
DPRVMKHTTD LDASKITQGG FDEHYVLSSR VRTGRSIRGL SLPPACTRAE RREVENVAIT
ALEGLKGDLA GRYKLSMT EQDQQLIDD HFLFDKPVSP LLTCAGMARD WPDARGIWHN
YDKTFLIWIN EEDHTRVISM EKGGMKRVF ERFGRGLKEV ERLIQERGWE FMWNERLGYI
LTCPSNLGTG LRAGVHVRIP KLSKDPFRFSK ILENLRLQKR GTGGVDAAV ADVYDISNID
RIGRSEVELV QIVIDGVNYL VDCEKKLERG QDIKVPPLP QFGKK

Molecular weight: 46.1 kDa (405aa) confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Payne RM, et al. (1995) Mol. Cell. Biochem. 133-134: 235-43. Qin W, Khuchua Z, et al. (1998) Mol. Cell. Biochem. 184 (1-2): 153-67.

Pictures:

