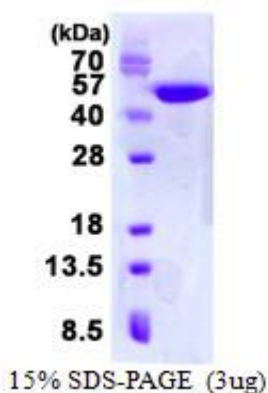


Creatine Kinase MT, Human Recombinant

CATALOG NO:	P1578-20 20 µg P1578-100 100 µg
ALTERNATE NAMES:	Creatine kinase U-type, mitochondrial, Acidic-type mitochondrial creatine kinase, Mia-CK, Ubiquitous mitochondrial creatine kinase, U-MtCK, CKMT1A, CKMT
MOL. WT.	45 kDa (403aa) (N-terminus His-Tag)
SOURCE:	<i>E. coli</i>
PURITY:	>95% SDS - PAGE
FORM:	Liquid
FORMULATION:	In 20 mM Tris-HCl buffer (pH 8.0) containing 0.15 M NaCl, 10% glycerol
SPECIFIC ACTIVITY:	> 50 unit/mg
UNIT DEFINITION:	One unit is defined as the amount of enzyme that converts 1.0 µmole of phosphate from phosphocreatine to ADP per minute at pH 7.5 at 37°C.
STORAGE CONDITIONS:	Store at 4°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.
DESCRIPTION:	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. Recombinant human CKMT1A protein, fused to His-tag at N-terminus, was expressed in <i>E. coli</i> and purified by using conventional chromatography techniques.
AMINO ACID SEQUENCE:	aa 40-417



3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

RELATED PRODUCTS:

- Creatine Kinase MB (CK-MB) (Mouse) ELISA Kit (E4607)
- Creatine Kinase (CK/CPK), Rabbit Muscle (P1301)
- Creatine Kinase MB (CK-MB) (Human) ELISA Kit (E4606)
- Creatine Kinase MB (CK-MB) (Rat) ELISA Kit (E4608)

FOR RESEARCH USE ONLY! Not to be used on humans.