

## Product datasheet for **TA372883**

### CKMT1A Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: Mouse heart tissue lysate IHC: 50-100 Positive control: Human tonsil Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human CKMT1A/CKMT1B
Formulation:	pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Predicted Protein Size:	47 kDa
Gene Name:	creatine kinase, mitochondrial 1A
Database Link:	<a href="#">Entrez Gene 548596 Human P12532</a>



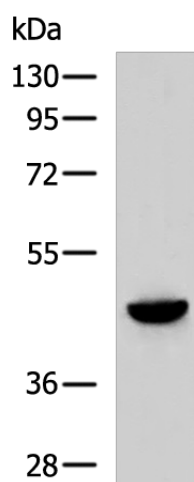
[View online »](#)

**Background:**

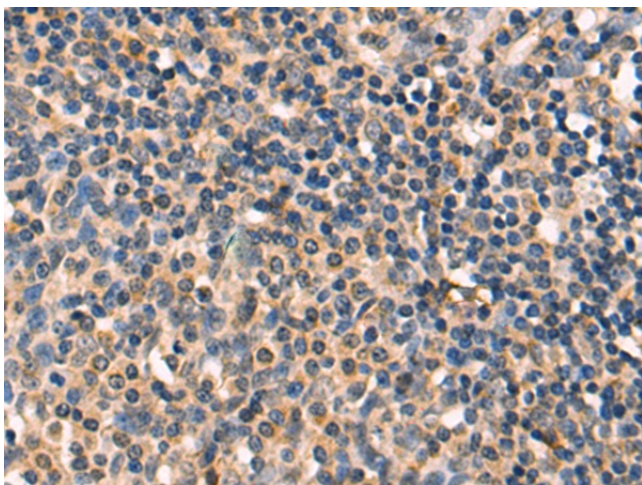
Mitochondrial creatine (MtCK) kinase is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate genes. Mitochondrial 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.

**Synonyms:**

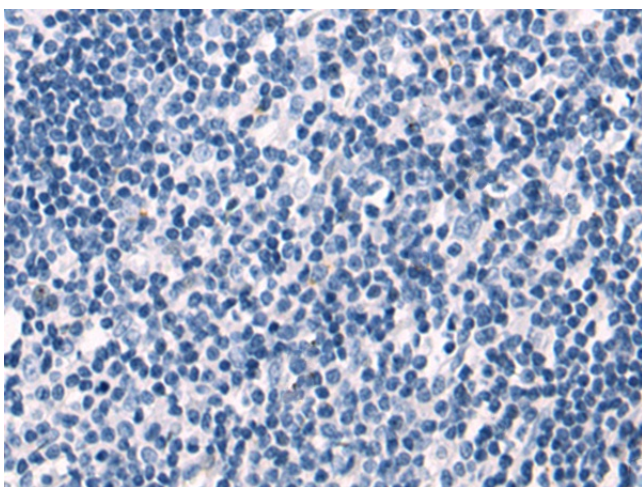
CKMT; CKMT1; FLJ50967; Mia-CK; U-MtCK; UMTCK

**Product images:**

Gel: 8%SDS-PAGE  
Lysate: 40  $\mu$ g  
Lane: Mouse heart tissue lysate  
Primary antibody: TA372883 (CKMT1A/CKMT1B Antibody) at dilution 1/450  
Secondary antibody: Goat anti rabbit IgG at 1/5000 dilution  
Exposure time: 20 seconds



Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA372883 (CKMT1A/CKMT1B Antibody) at dilution 1/45 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA372883 (CKMT1A/CKMT1B Antibody) at dilution 1/45, treated with synthetic peptide. (Original magnification:  $\times 200$ )