

# **Product datasheet for TA368648**

## **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 esophagus cancer

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% NaN3, 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: Entrez Gene 548596 Human

P12532

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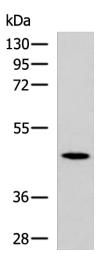


#### Background:

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.

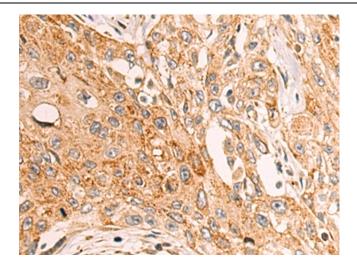
Synonyms: CKMT; CKMT1; FLJ50967; Mia-CK; U-MtCK; UMTCK

## **Product images:**

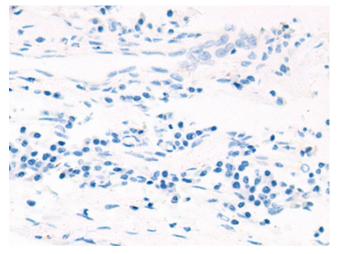


Gel: 8%SDS-PAGE Lysate: 40 µg Lane: Mouse heart tissue lysate Primary antibody: TA368648 (CKMT1A/CKMT1B Antibody) at dilution 1/400 Secondary antibody: Goat anti rabbit IgG at 1/5000 dilution Exposure time: 20 seconds





Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA368648 (CKMT1A/CKMT1B Antibody) at dilution 1/40 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA368648 (CKMT1A/CKMT1B Antibody) at dilution 1/40, treated with synthetic peptide. (Original magnification: ×200)