

Product datasheet for **TA374827S**

CKMT1B Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IP, WB
Recommended Dilution:	WB,1:500 - 1:2000 IF,1:50 - 1:100 IP,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-85 of human CKMT1B (NP_066270.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	47kDa/50kDa
Gene Name:	creatine kinase, mitochondrial 1B
Database Link:	Entrez Gene 1159 Human P12532



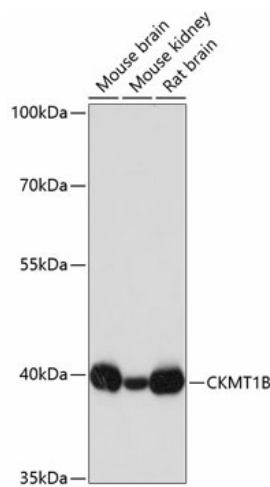
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Background:

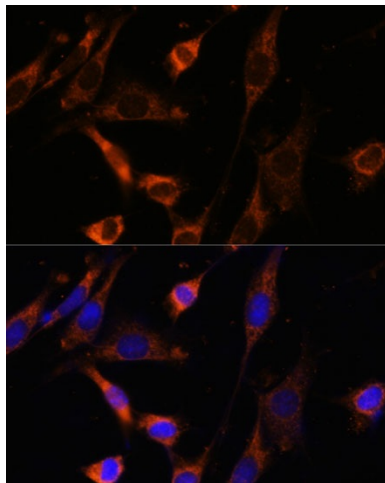
Mitochondrial creatine (MtCK) kinase is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It belongs to the creatine kinase isoenzyme family. It exists as two isoenzymes, sarcomeric MtCK and ubiquitous MtCK, encoded by separate genes. Mitochondrial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

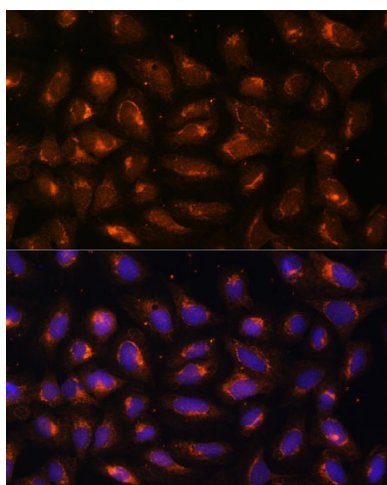
CKMT; CKMT1; Mia-CK; OTTHUMP00000066275; U-MtCK; UMTCK

Product images:

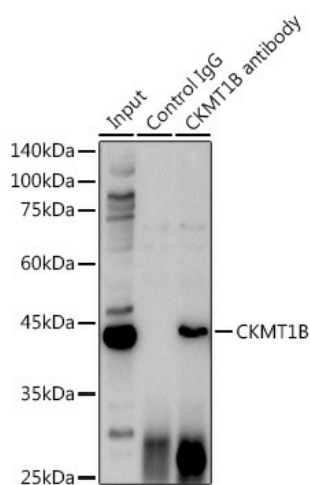
Western blot analysis of extracts of various cell lines, using CKMT1B antibody ([TA374827]) at 1:3000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 3s.



Immunofluorescence analysis of NIH-3T3 cells using CKMT1B Polyclonal Antibody ([TA374827]) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using CKMT1B Polyclonal Antibody ([TA374827]) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 600ug extracts of Mouse brain cells using 3ug CKMT1B antibody ([TA374827]). Western blot was performed from the immunoprecipitate using CKMT1B antibody ([TA374827]) at a dilution of 1:1000.