

A3046

Leader in Biomolecular Solutions for Life Science



## CKMT1B Rabbit pAb

Catalog No.: A3046

### Basic Information

#### Observed MW

42kDa

#### Calculated MW

47kDa

#### Category

Polyclonal Antibody

#### Applications

WB,IF/ICC,IP,ELISA

#### Cross-Reactivity

Human,Mouse,Rat

### 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.

### Recommended Dilutions

**WB** 1:500 - 1:2000

**IF/ICC** 1:50 - 1:100

**IP** 0.5µg-4µg antibody for  
400µg-600µg extracts  
of whole cells

**ELISA** Recommended starting  
concentration is 1  
µg/mL. Please optimize  
the concentration  
based on your specific  
assay requirements.

### Immunogen Information

#### Gene ID

1159

#### Swiss Prot

P12532

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-85 of human CKMT1B (NP\_066270.1).

#### Synonyms

CKMT; CKMT1; UMTCK; CKMT1B

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

Affinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

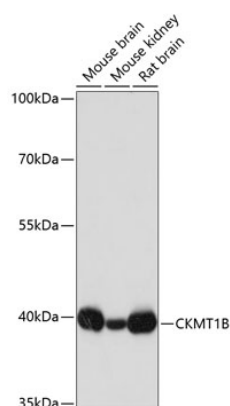
Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

### Contact

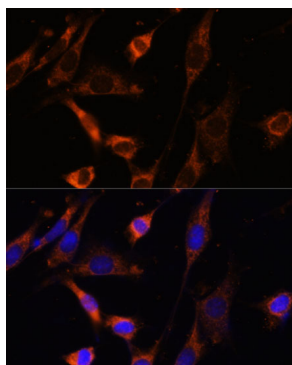


[www.abclonal.com](http://www.abclonal.com)

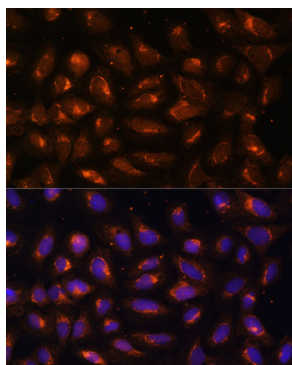
## Validation Data



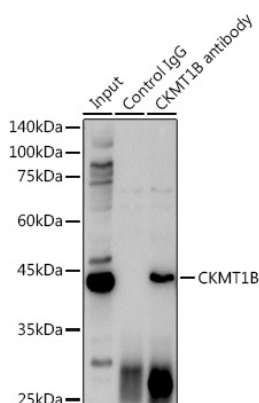
Western blot analysis of various lysates using CKMT1B Rabbit pAb (A3046) at 1:3000 dilution.  
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 3s.



Immunofluorescence analysis of NIH-3T3 cells using CKMT1B Rabbit pAb (A3046) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using CKMT1B Rabbit pAb (A3046) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 600 µg extracts of Mouse brain cells using 3 µg CKMT1B antibody (A3046). Western blot was performed from the immunoprecipitate using CKMT1B antibody (A3046) at a dilution of 1:1000.