

## CKMT1B Polyclonal Antibody

**Catalog No.** E-AB-65424

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

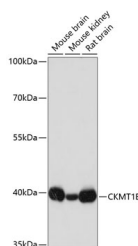
### Description

<b>Reactivity</b>	Human,Mouse,Rat
<b>Immunogen</b>	Recombinant fusion protein of human CKMT1B
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Conjugation</b>	Unconjugated
<b>Buffer</b>	PBS with 0.01% thiomersal,50% glycerol,pH7.3.

### Applications Recommended Dilution

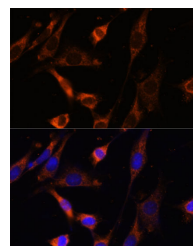
<b>WB</b>	1:500-1:2000
<b>IF</b>	1:50-1:100

### Data

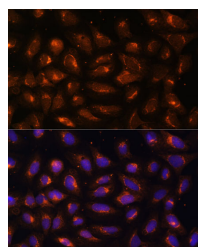


Western blot analysis of extracts of various cell lines using CKMT1B Polyclonal Antibody at 1:3000 dilution.

**Observed Mw:42kDa**  
**Calculated Mw:47kDa/50kDa**



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



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

### Preparation & Storage

#### For Research Use Only

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

## 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.

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