

## CKMT1A/CKMT1B Antibody

Catalog No: #36996

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## Description

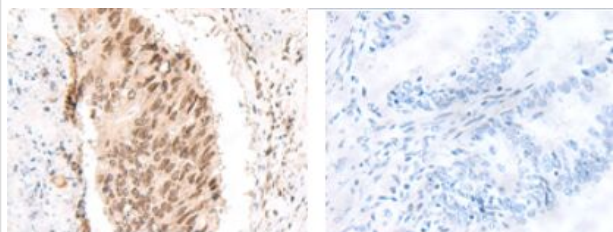
Product Name	CKMT1A/CKMT1B Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen affinity purification.
Applications	WB IHC
Species Reactivity	Human
Specificity	The antibody detects endogenous levels of total CKMT1A/CKMT1B protein.
Immunogen Type	Peptide
Immunogen Description	Synthetic peptide corresponding to a region derived from internal residues of human Creatine kinase, mitochondrial 1B
Target Name	CKMT1A-CKMT1B
Other Names	CKMT; CKMT1; UMTCK
Accession No.	Swiss-Prot#: P12532NCBI Gene ID: 1159Gene Accssion: NP_066270
Uniprot	P12532
GeneID	1159;548596;
SDS-PAGE MW	50kd
Concentration	1.7 mg/ml
Formulation	Rabbit IgG in pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol.
Storage	Store at -20°C

## Application Details

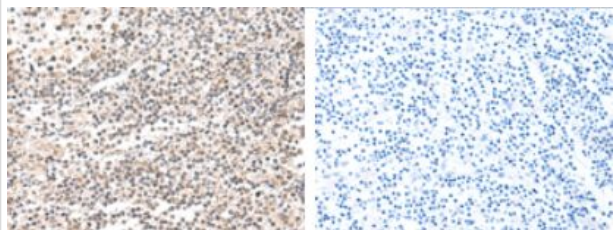
Western blotting: 1:500-1:2000

Immunohistochemistry: 1:40-1:200

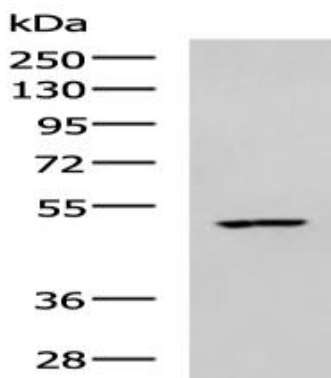
## Images



The image on the left is immunohistochemistry of paraffin-embedded Human colorectal cancer tissue using CKMT1A/CKMT1B Antibody at dilution 1/55, on the right is treated with synthetic peptide. (Original magnification:  $\times$  200)



The image on the left is immunohistochemistry of paraffin-embedded Human tonsil tissue using CKMT1A/CKMT1B Antibody at dilution 1/55, on the right is treated with synthetic peptide. (Original magnification:  $\times 200$ )



Gel: 8%SDS-PAGE  
Lysate: 40  $\mu$ g  
Lane: MCF7 cell lysate  
Primary antibody: CKMT1A/CKMT1B Antibody at dilution 1/600  
Secondary antibody: Goat anti rabbit IgG at 1/5000 dilution  
Exposure time: 1 minute

## 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.?

Note: This product is for in vitro research use only