



Anti-CKMT1A (N-terminal) polyclonal antibody (DPAB-DC2367)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

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.

Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human CKMT1A.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Purification	Protein G purification
Conjugate	Unconjugated
Applications	WB (Tissue lysate), WB (Cell lysate), ELISA,
Format	Liquid
Size	100 µl

Buffer	In PBS (0.09% sodium azide)
Preservative	0.09% Sodium Azide
Storage	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	CKMT1A creatine kinase, mitochondrial 1A [Homo sapiens (human)]
Official Symbol	CKMT1A
Synonyms	CKMT1A; creatine kinase, mitochondrial 1A; CKMT1; creatine kinase U-type, mitochondrial; U-MtCK; mia-CK; ubiquitous mitochondrial creatine kinase; acidic-type mitochondrial creatine kinase; creatine kinase, mitochondrial 1 (ubiquitous);
Entrez Gene ID	548596
Protein Refseq	NP_001015001
UniProt ID	P12532
Chromosome Location	15q15
Pathway	Arginine and proline metabolism; Creatine metabolism; Creatine pathway; Metabolism of amino acids and derivatives.
Function	ATP binding; creatine kinase activity;