SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-Creatine kinase MT antibody

Catalog Number: SL14050R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Creatine kinase MT
Immunogen:	KLH conjugated synthetic peptide derived from human Creatine kinase MT: 121-220/417
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Mouse,Rat (predicted:Human,Chicken,Pig,Sheep)
Predicted MW.:	43kDa
Subcellular Location:	The cell membrane
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

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	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. [provided by RefSeq, Jul 2008] **Function:** Creatine kinase MT 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. Creatine kinase MT 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. **Subcellular Location:** Cell Membrane and Mitochondrial **Similarity:** Belongs to the ATP:guanido phosphotransferase family. Contains 1 phosphagen kinase C-terminal domain. Contains 1 phosphagen kinase N-terminal domain. **Database links:** **Entrez Gene:** 1159 Human **Entrez Gene:** 281692 Cow **Entrez Gene:** 548596 Human **Entrez Gene:** 12716 Mouse **Entrez Gene:** 29593 Rat Omim: 123290 Human **SwissProt:** Q9TTK8 Cow **SwissProt:** P12532 Human **SwissProt:** P30275 Mouse **SwissProt:** Q29577 Pig **SwissProt:** P25809 Rat **SwissProt:** Q7ZUN7 Zebrafish **Unigene:** 425633 Human

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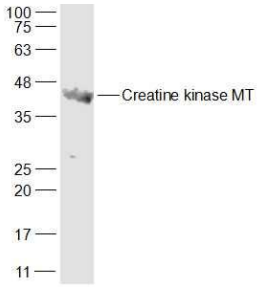
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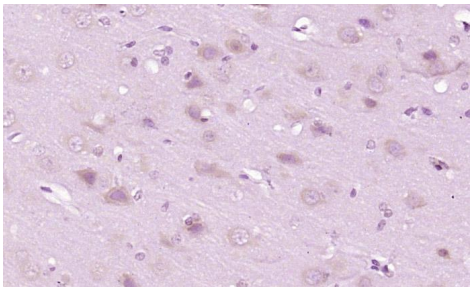
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[VALIDATION IMAGES]





Sample:
Muscle (Mouse) Lysate at 40 ug
Primary: Anti-Creatine kinase MT (SL14050R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 43 kD
Observed band size: 43 kD

Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Creatine kinase MT) Polyclonal Antibody, Unconjugated (SL14050R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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