



## Rabbit Anti-CKMT antibody

SL6522R

<b>Product Name:</b>	CKMT
<b>Chinese Name:</b>	酸性Mitochondrion肌酸激酶抗体
<b>Alias:</b>	Acidic type mitochondrial creatine kinase; CKMT; CKMT1; CKMT1A; CKMT1B; Creatine kinase mitochondrial 1 ubiquitous; Creatine kinase ubiquitous mitochondrial; Mia CK; Ubiquitous mitochondrial creatine kinase; UMTCK; KCRU_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	43kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CKMT:115-220/417
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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.

**Function:**

Reversibly catalyzes the transfer of phosphate between ATP and various phosphagens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.

**Subunit:**

Exists as an octamer composed of four MTCK homodimers.

**Subcellular Location:**

Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side.

**Similarity:**

Belongs to the ATP:guanido phosphotransferase family.

Contains 1 phosphagen kinase C-terminal domain.

Contains 1 phosphagen kinase N-terminal domain.

**SWISS:**

P12532

**Gene ID:**

1159

**Database links:**

[Entrez Gene: 1159](#)Human

[Entrez Gene: 29593](#)Rat

[Omim: 123290](#)Human

[SwissProt: P12532](#)Human

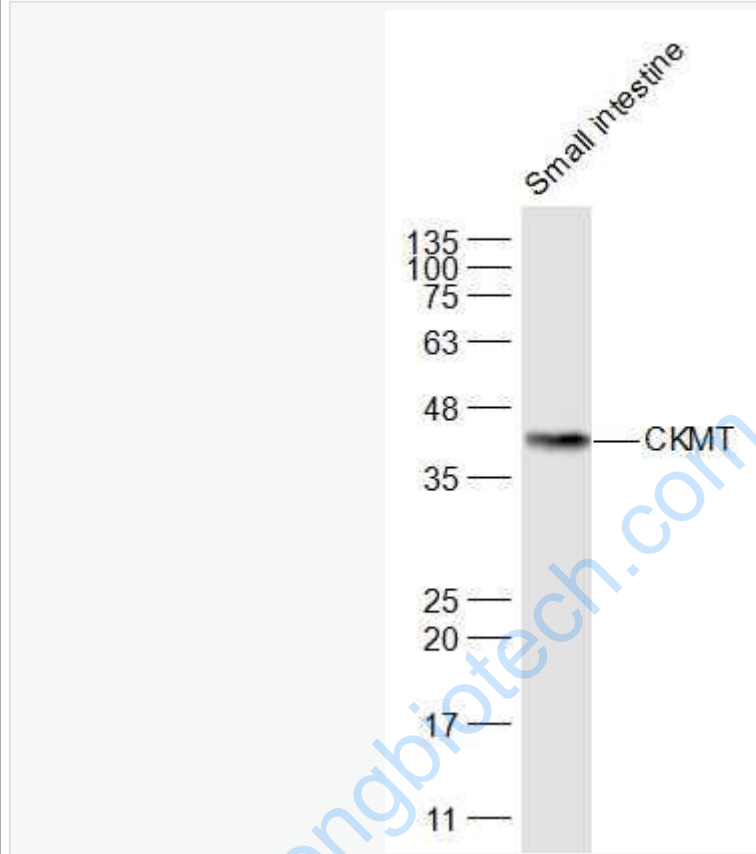
[Unigene: 425633](#)Human

[Unigene: 155589](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

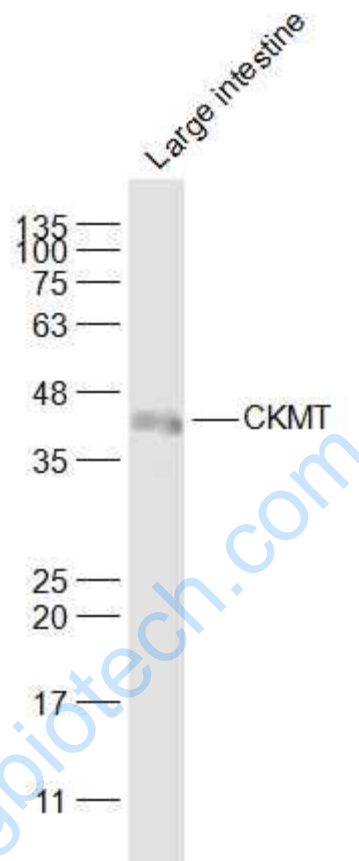
Small intestine (Mouse) Lysate at 40 ug

Primary: Anti-CKMT (SL6522R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 43 kD

Observed band size: 43 kD



Sample:

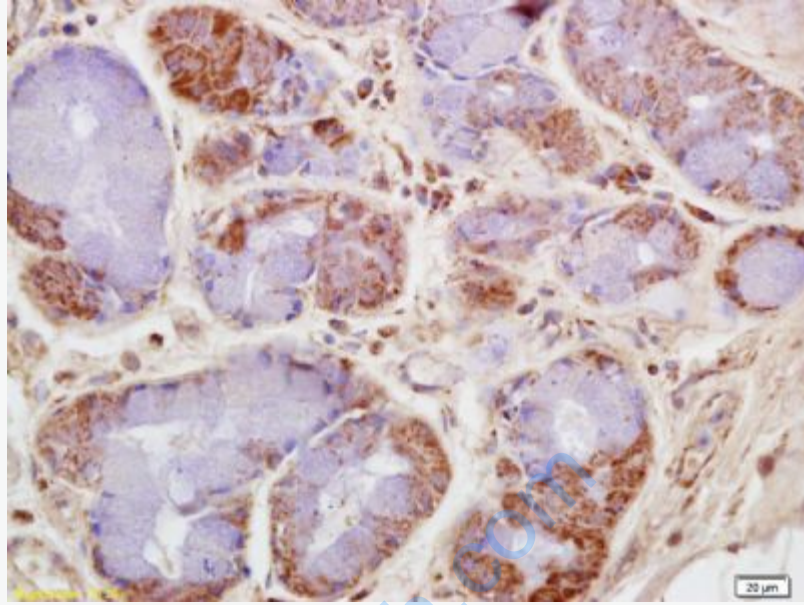
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Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CKMT/Creatine kinase MT Polyclonal Antibody,

Unconjugated(SL6522R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining