

Product datasheet for **TA322243**

CKMT1B Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: MCF7 cell lysate IHC: 50-300 Positive control: Human gastric cancer Predicted cell location: Cytoplasm and Nucleus
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide peptide corresponding to a region derived from 32-46 amino acids of human creatine kinase, mitochondrial 1B
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	creatine kinase, mitochondrial 1B
Database Link:	NP_066270 Entrez Gene 1159 Human P12532



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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.

Synonyms:

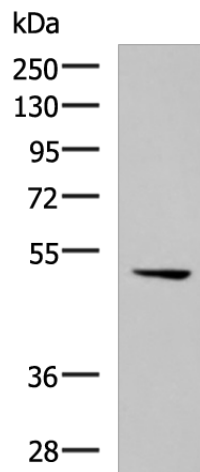
CKMT; CKMT1; UMTCK

Protein Families:

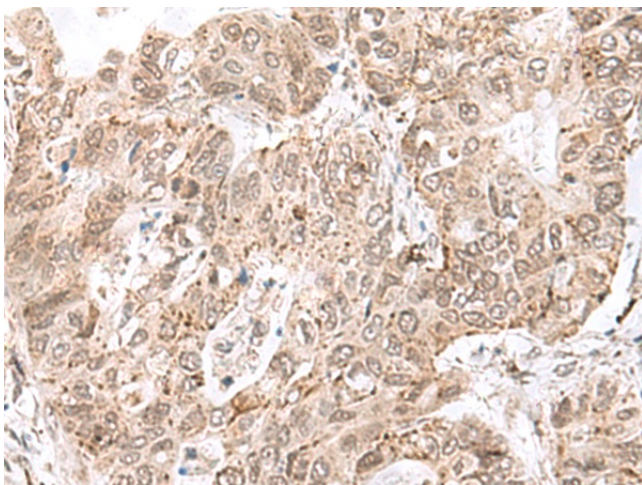
Druggable Genome

Protein Pathways:

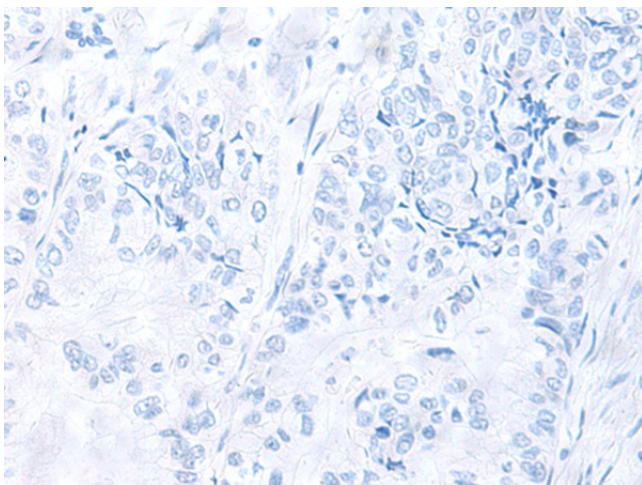
Arginine and proline metabolism, Metabolic pathways

Product images:

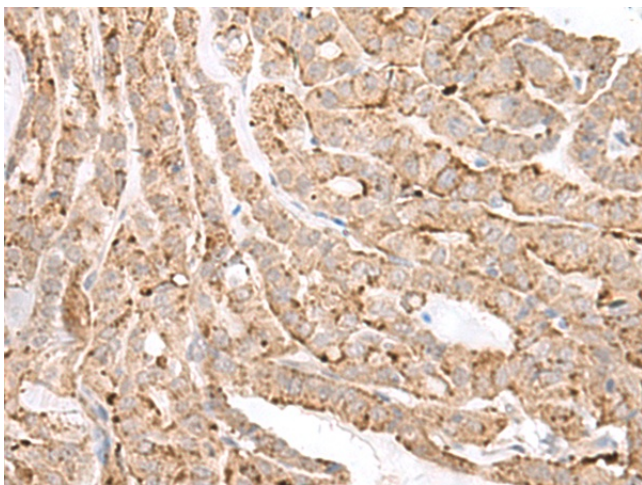
Gel: 8%SDS-PAGE
Lysate: 40 µg
Lane: MCF7 cell lysate
Primary antibody: TA322243 (CKMT1A/CKMT1B Antibody) at dilution 1/600
Secondary antibody: Goat anti rabbit IgG at 1/5000 dilution
Exposure time: 15 seconds



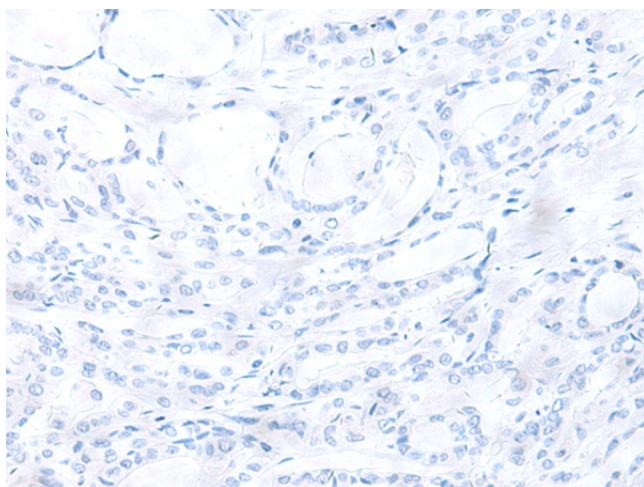
Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA322243 (CKMT1A/CKMT1B Antibody) at dilution 1/75 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using TA322243 (CKMT1A/CKMT1B Antibody) at dilution 1/75, treated with synthetic peptide. (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using TA322243 (CKMT1A/CKMT1B Antibody) at dilution 1/75 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human thyroid cancer tissue using TA322243 (CKMT1A/CKMT1B Antibody) at dilution 1/75, treated with synthetic peptide. (Original magnification: ×200)