

Product datasheet for **AP20412PU-N**

CKMT2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on paraffin sections: 1/50-1/200. Immunofluorescence: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of sMtCK protein. (region surrounding Trp262)
Formulation:	Phosphate buffered saline (PBS), pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction Preservative: 15 mM sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 45 kDa
Gene Name:	creatine kinase, mitochondrial 2
Database Link:	<u>Entrez Gene 76722 Mouse</u> <u>Entrez Gene 688698 Rat</u> <u>Entrez Gene 1160 Human</u> <u>P17540</u>



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Background:

CKMT2 belongs to the creatine kinase isoenzyme family, and is responsible for the transfer of high energy phosphate from mitochondria to the cytosolic carrier, creatine. It exists as two isoenzymes, sarcomeric CKMT2 and ubiquitous CKMT2, which are 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. Sarcomeric mitochondrial creatine kinase has 80% homology with the coding exons of ubiquitous mitochondrial creatine kinase. This gene contains sequences homologous to several motifs that are shared among some nuclear genes encoding mitochondrial proteins and thus may be essential for the coordinated activation of these genes during mitochondrial biogenesis. Three transcript variants encoding the same protein have been found for this gene.

Synonyms:

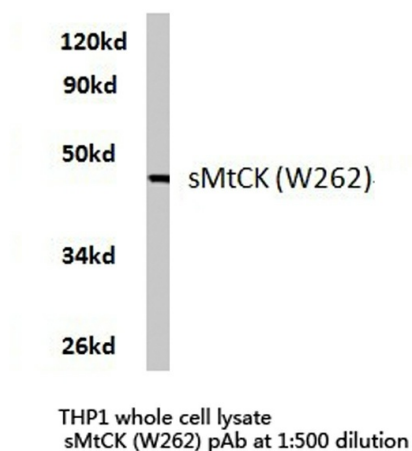
S-MtCK, Mib-CK, Creatine kinase S

Protein Families:

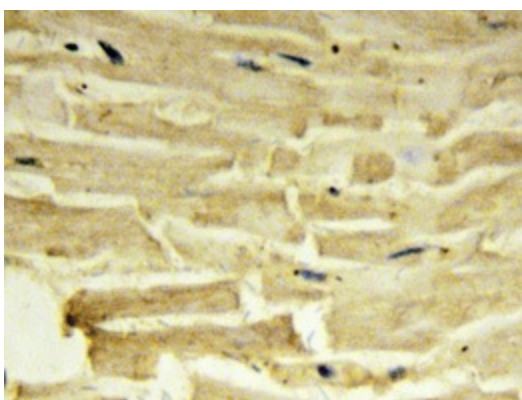
Druggable Genome

Protein Pathways:

Arginine and proline metabolism, Metabolic pathways

Product images:


Western blot (WB) analysis of sMtCK antibody (Cat.-No.: AP20412PU-N) in extracts from THP1 cells.



Immunohistochemistry analyzes of sMtCK antibody (Cat.-No.: AP20412PU-N) in paraffin-embedded human heart tissue.