

For Research Use Only

CKM-Specific Polyclonal antibody

Catalog Number: 18712-1-AP

6 Publications



Basic Information

Catalog Number:

18712-1-AP

Size:

150ul, Concentration: 350 ug/ml by Nanodrop and 267 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC007462

GeneID (NCBI):

1158

UNIPROT ID:

P06732

Full Name:

creatine kinase, muscle

Calculated MW:

43 kDa

Observed MW:

43 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

mouse, rat, bacterial

Positive Controls:

WB : mouse brain tissue, mouse heart tissue, mouse small intestine tissue, mouse skeletal muscle tissue

IHC : mouse skeletal muscle tissue, rat heart tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

CKM, also named CKMM and M-CK, is a member of the ATP:guanido phosphotransferase protein family. It is a cytoplasmic enzyme involved in energy homeostasis and is an important serum marker for myocardial infarction. CKM reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in striated muscle as well as in other tissues, and as a heterodimer with a similar brain isozyme in the heart. CK isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain, and spermatozoa. CK MB consists of a dimer of nonidentical chains. With MM being the major form in skeletal muscle and myocardium, MB exists in the myocardium, and BB exists in many tissues, especially the brain. Inactivation of creatine kinase by gliotoxin was accompanied by the formation of a 37-kDa form of the enzyme. This oxidized form of creatine kinase was rapidly reconverted to the 42 kDa species by the addition of reducing agents concomitant with restoration of activity. (PMID: 10827185). This antibody is specific to CKM.

Notable Publications

Author	Pubmed ID	Journal	Application
Jing Hao	32990380	Cell Prolif	WB
Eric P Mosher	34561299	Mol Pharmacol	WB
Ying Li	34548056	BMC Musculoskelet Disord	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

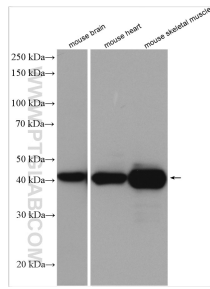
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

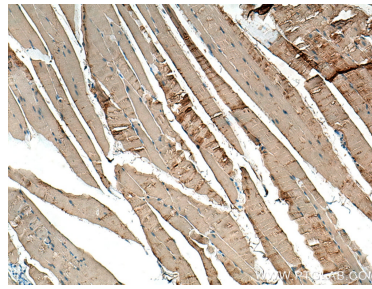
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 18712-1-AP (CKM-Specific antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 18712-1-AP (CKM-Specific antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).