For Research Use Only

CKM-Specific Monoclonal antibody

Catalog Number:60177-1-Ig 1 Publications

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Basic Information

Catalog Number:
60177-1-Ig

Size:
3500 ug/ml

Source:
Mouse

Isotype:
IgG2a

GenBank Accession Number:
BC007462

GeneID (NCBI):
1158

UNIPROT ID:
P06732

Full Name:
creatine kinase, muscle

Calculated MW:
43 kDa

Observed MW:
43 kDa, 90 kDa, 130 kDa

Purification Method:
Protein A purification

CloneNo.:
2G3F6

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:1000-1:4000
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF-P, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human

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

Positive Controls:

WB : Human skeletal muscle, human skeletal muscle tissue

IHC : human liver tissue, mouse heart tissue, mouse testis tissue, rat brain tissue, rat testis tissue

IF-P : mouse heart tissue,

Background Information

CKM, also named as 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 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 existing in myocardium. CKM has a calculated molecular mass of 43 kDa, and the 90-kDa and 130-kDa bands could be due to acovalent cross-linking of two and three CKm subunits, respectively (PMID: 20195383).

Notable Publications

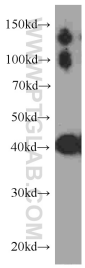
Author	Pubmed ID	Journal	Application
Qi Li	38626518	Biomed Pharmacother	WB

Storage

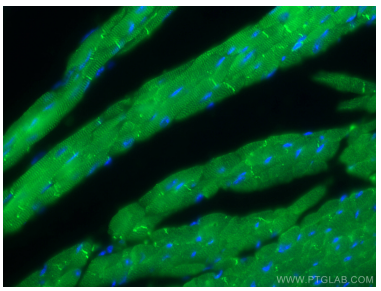
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

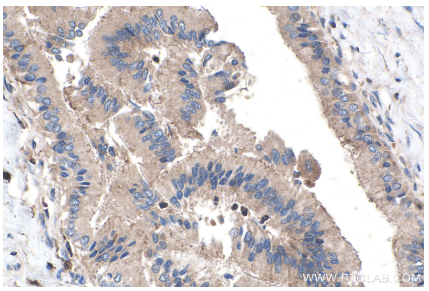
Selected Validation Data



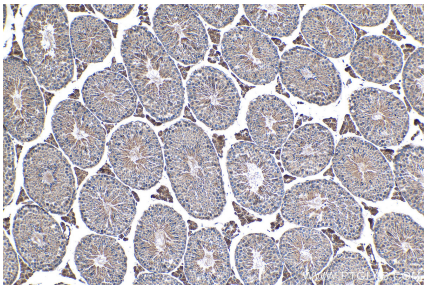
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 60177-1-Ig (CKM-Specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



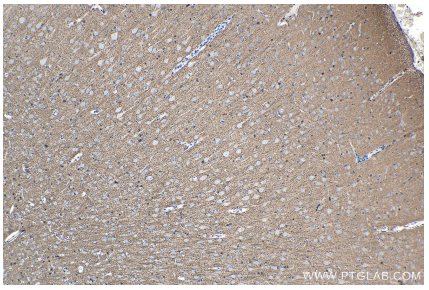
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CKM-Specific antibody (60177-1-Ig, Clone: 2G3F6) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



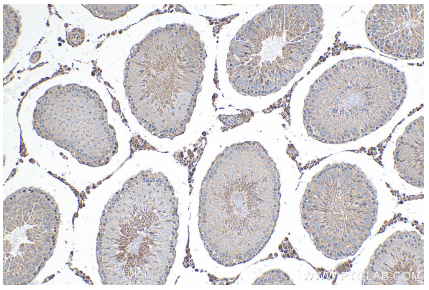
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



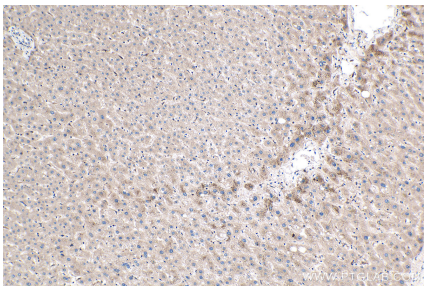
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



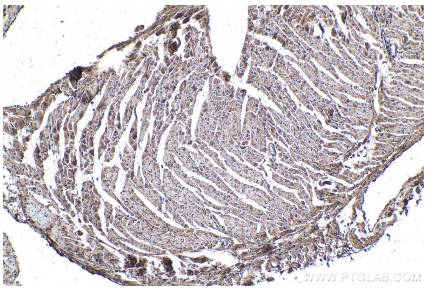
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



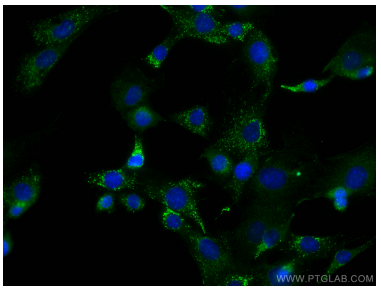
Immunohistochemical analysis of paraffin-embedded rat testis tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed C2C12 cells using CKM-Specific antibody (60177-1-Ig, Clone: 2G3F6) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).