For Research Use Only

## CKM-Specific Monoclonal antibody

Catalog Number: 60177-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

60177-1-lg BC007462 GeneID (NCBI): CloneNo.: 150ul, Concentration: 3500 µg/ml by 1158 2G3F6

Nanodrop and 2027 µg/ml by Bradford<sub>Full Name</sub>:

method using BSA as the standard; creatine kinase, muscle

Calculated MW: Mouse 43 kDa

Isotype: Observed MW:

IgG2a 43 kDa, 90 kDa, 130 kDa

**Purification Method:** Protein A purification

Recommended Dilutions:

WB 1:500-1:1000 IHC 1:20-1:200 IF 1:50-1:400

**Applications** 

**Tested Applications:** 

IF, IHC, WB, ELISA **Species Specificity:** human, mouse, rat

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

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

IF: HepG2 cells, C2C12 cells, 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, and BB existing in many tissues, especially brain.

Storage

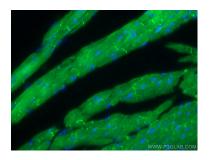
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

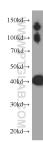
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## Selected Validation Data



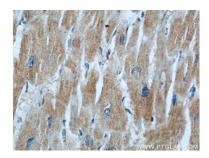
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CKM-Specific antibody (60177-1-Ig, Clone: 2G3F6) at dilution of 1:400 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).



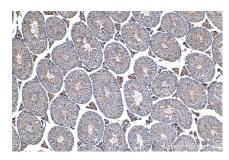
human skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 60177-1-Ig (CKM-Specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



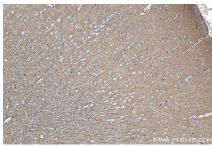
Immunohistochemical analysis of paraffinembedded human heart slide using 60177-1-lg (CKM-Specific Antibody) at dilution of 1:50.



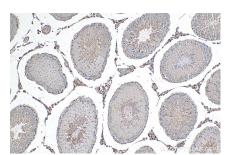
Immunohistochemical analysis of paraffinembedded human heart slide using 60177-1-lg (CKM-Specific Antibody) at dilution of 1:50.



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



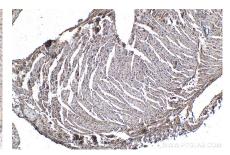
Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 60177-1-lg (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



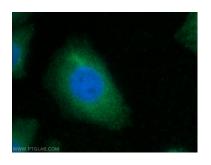
Immunohistochemical analysis of paraffinembedded rat testis tissue slide using 60177-1-lg (CKM-Specific antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver tissue slide using 60177-1-1g (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 paraffinembedded mouse heart tissue slide using 60177-1-1g (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 HepG2 cells using 60177-1-Ig (CKM-Specific antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).