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CKM Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7073b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P06732
Other Accession	P00563, Q5XLD3, Q9XSC6
Reactivity	Human
Predicted	Bovine, Pig, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5382
Calculated MW	43101
Antigen Region	283-313

Additional Information

Gene ID	1158
Other Names	Creatine kinase M-type, Creatine kinase M chain, M-CK, Creatine kinase M-type, N-terminally processed, CKM, CKMM
Target/Specificity	This CKM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 283-313 amino acids from the C-terminal region of human CKM.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CKM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

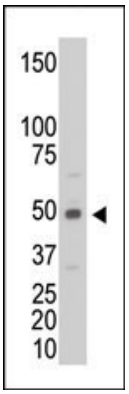
Name	CKM
Synonyms	CKMM

Function	Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate). Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa.
Cellular Location	Cytoplasm.

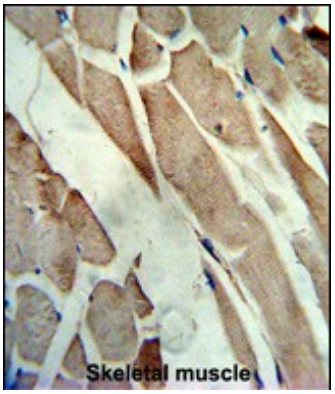
Background

Creatine kinase isoenzymes play a central role in energy transduction in tissues with large, fluctuating energy demands, such as skeletal muscle, heart, brain and spermatozoa. The CKM isoform, predominant in skeletal muscle and heart tissue, 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. The encoded protein is a member of the ATP:guanido phosphotransferase protein family.

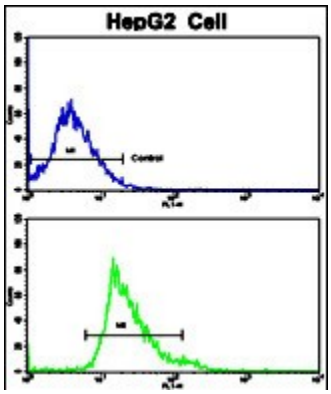
Images



The anti-CKM Pab (Cat. #AP7073b) is used in Western blot to detect CKM in C6 cell lysate.



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Flow cytometric analysis of HepG2 cells using Creatine Kinase MB (CKM) Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Regulation of sodium-calcium exchanger activity by creatine kinase under energy-compromised conditions.