

# Creatine Kinase B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7059b

## Product Information

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Application	WB, E
Primary Accession	<a href="#">P12277</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	42644
Antigen Region	240-270

## Additional Information

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Gene ID	1152
Other Names	Creatine kinase B-type, B-CK, Creatine kinase B chain, CKB, CKBB
Target/Specificity	This Creatine Kinase B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 240-270 amino acids from the C-terminal region of human Creatine Kinase B.
Dilution	WB~~1:1000 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	Creatine Kinase B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	CKB ( <a href="#">HGNC:1991</a> )
Synonyms	CKBB
Function	Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate) (PubMed: <a href="#">8186255</a> ). 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 (Probable). Acts as a key regulator of adaptive thermogenesis as part of the futile creatine cycle: localizes to the mitochondria of thermogenic fat cells and acts by mediating phosphorylation of creatine to initiate a futile cycle of creatine phosphorylation and dephosphorylation (By similarity). During the futile creatine cycle, creatine and N-phosphocreatine are in a futile cycle, which dissipates the high energy charge of N- phosphocreatine as heat without performing any mechanical or chemical work (By similarity).

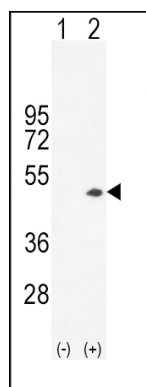
#### Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q04447}. Mitochondrion {ECO:0000250|UniProtKB:Q04447}. Cell membrane. Note=Localizes to the mitochondria of thermogenic fat cells via the internal MTS-like signal (iMTS-L) region {ECO:0000250|UniProtKB:Q04447}

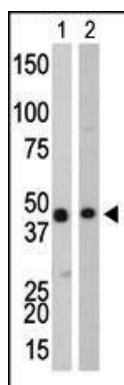
## Background

Creatine Kinase (CK) is a dimeric enzyme composed of either M- or B-type subunits. The resulting isoenzymes are expressed at varying levels in different tissues. CK-BB, a cytoplasmic predominantly found in brain tissues, participates in energy homeostasis, reversibly catalyzing the transfer of a phosphate group between ATP and target proteins such as a creatine phosphate. CK-BB exists in normally negligible amounts in the serum of adults, overexpression of CK-BB is associated with cancers of the breast, ovary, prostate, colon, and in small-cell lung cancer. Global assessment of changes in serum levels of CK-BB, CK-MB and CK-MM, are used as a marker for myocardial infarction.

## Images



Western blot analysis of CKB (arrow) using rabbit polyclonal CKB-C254 (Cat. #AP7059b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CKB gene.



The anti-CKB Pab (Cat. #AP7059b) is used in Western blot to detect CKB in Y79 cell lysate (Lane 1) and mouse colon tissue lysate (Lane 2).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.