

# Creatine Kinase BB Antibody (Center)

Mouse Monoclonal Antibody (Mab)

Catalog # AM2198b

## Product Information

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Application	WB, E
Primary Accession	<a href="#">P12277</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	893CT29.1.1
Calculated MW	42644

## 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	Purified His-tagged CKB protein was used to produced this monoclonal antibody.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 BB Antibody (Center) 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}

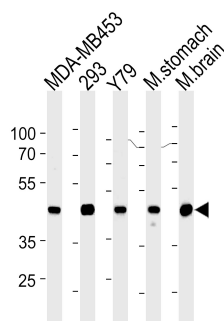
## Background

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.

## References

Villarreal-Levy G., et al. Biochem. Biophys. Res. Commun. 144:1116-1127(1987).  
 Mariman E.C.M., et al. Genomics 1:126-137(1987).  
 Kaye F.J., et al. J. Clin. Invest. 79:1412-1420(1987).  
 Mariman E.C.M., et al. Nucleic Acids Res. 17:6385-6385(1989).  
 Ota T., et al. Nat. Genet. 36:40-45(2004).

## Images



Creatine Kinase BB (CKB) Antibody (Center) (Cat. #AM2198b) western blot analysis in MDA-MB453,293,Y79 cell line ,mouse stomach and brain tissue lysates (35µg/lane).This demonstrates the CKB antibody detected the CKB protein (arrow).

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