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Creatine Kinase BB Antibody (Center)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2198b

Product Information

Application	WB, E
Primary Accession	P12277
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	893CT29.1.1
Calculated MW	42644

Additional Information

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

Name	CKB (HGNC:1991)
Synonyms	CKBB
Function	Reversibly catalyzes the transfer of phosphate between ATP and various phosphogens (e.g. creatine phosphate) (PubMed:8186255). 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}

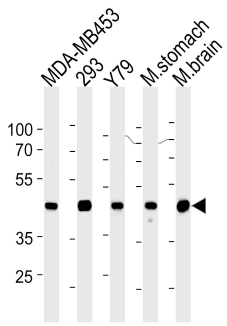
Background

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'.