10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Creatine Kinase BB Antibody (Center)

Mouse Monoclonal Antibody (Mab)
Catalog # AW5061

Product Information

Application	WB
Primary Accession	P12277
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	42644
Isotype	IgG1
Antigen Source	Human

Additional Information

Gene ID	1152
Antigen Region	1-361
Other Names	CKB;CKBB; Creatine kinase B-type; Creatine kinase B-type; B-CK; Creatine kinase B-type; Creatine kinase B chain
Dilution	WB~~1:1000
Target/Specificity	Purified His-tagged CKB protein was used to produced this monoclonal antibody.
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}

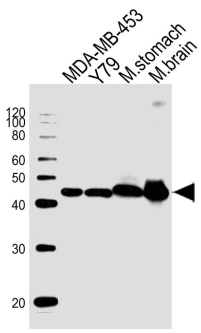
Background

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



Western blot analysis of lysates from MDA-MB-453,Y79 cell line,mouse stomach,mouse brain tissue lysate(from left to right), using Creatine Kinase BB (CKB) Antibody (Center)(Cat. #AW5061). AW5061 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.