

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone 2ba6]
Catalog # AH11097

Specification

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - Product Information

Application	,13,3,4,
Primary Accession	P12277
Other Accession	1152 , 173724
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken, Rhesus, Bovine, Chimpanzee, Dog
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	43kDa (Monomer); 86kDa (Dimer) KDa

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - Additional Information

Gene ID 1152

Other Names

Creatine kinase B-type, 2.7.3.2, B-CK, Creatine kinase B chain, CKB, CKBB

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - 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}

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - Images**Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - Background**

Creatine kinases (CK) are a large family of isoenzymes that regulate levels of ATP in subcellular compartments, where they provide ATP at sites of fluctuating energy demand by the transfer of phosphates between creatine and adenine nucleotides. CKs provide the energy of phosphate hydrolysis necessary to drive the normal function of many cellular systems. In cells, the cytosolic CK enzymes consist of two subunits, which can be either B (brain type) or M (muscle type). There are three different isoenzymes: CKMM, CKBB and CKMB. This MAb recognizes the CKBB isoenzyme and does not react with the B subunit in CKMB. It shows minimal reactivity with other human serum proteins

Creatine Phosphokinase-BB (CK-BB) Antibody - With BSA and Azide - References

Mariman, E.C., et al. 1987. Structure and expression of the human creatine kinase B gene. Genomics 1: 126-137. | Mariman, E.C., et al. 1989. Complete nucleotide sequence of the human creatine kinase B gene. Nucleic Acids Res. 17: 6385