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Creatine Kinase B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7059b

Specification

Creatine Kinase B Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P12277
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42644**
Antigen Region	**240-270**

Creatine Kinase B Antibody (C-term) - Additional Information

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.

Creatine Kinase B Antibody (C-term) - 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).

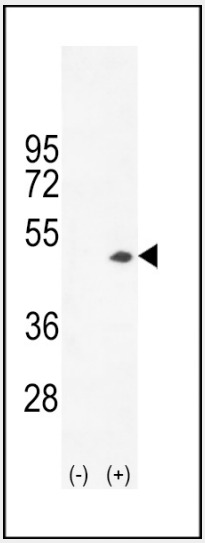
Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q04447}. Mitochondrion {ECO:0000250|UniProtKB:Q04447}. Cell membrane. Note=Localizes to the mitochondria of thermogenic fat cells via the internal MTS-like signal (iMTS-L) region {ECO:0000250|UniProtKB:Q04447}

Creatine Kinase B Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Creatine Kinase B Antibody (C-term) - 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.

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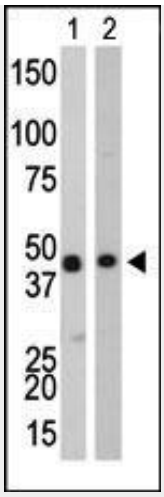

The anti-CKB Pab (Cat. #AP7059b) is used in Western blot to detect CKB in Y79 cell lysate (Lane 1) and mouse colon tissue lysate (Lane 2).

Creatine Kinase B Antibody (C-term) - 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 neglible 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.