

## **CKB / Creatine Kinase BB Antibody**

Goat Polyclonal Antibody Catalog # ALS17224

## **Specification**

### CKB / Creatine Kinase BB Antibody - Product Information

Application IHC-P
Primary Accession P12277
Other Accession 1152
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 42644

# CKB / Creatine Kinase BB Antibody - Additional Information

### **Gene ID 1152**

### **Other Names**

CKB, CKBB, Creatine kinase-B, Creatine kinase, b chain, B-CK, Creatine kinase B chain, Creatine kinase B-type, Creatine kinase, brain

# **Target/Specificity**

Specific for human CK-BB. 50% cross-reaction with CK-MB

## **Reconstitution & Storage**

PBS, pH 7.4, 0.05% sodium azide. Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

### **Precautions**

CKB / Creatine Kinase BB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **CKB / Creatine Kinase BB Antibody - 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:<a href="http://www.uniprot.org/citations/8186255" target="\_blank">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**

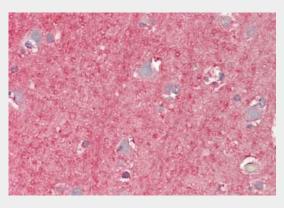
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q04447}. Mitochondrion {ECO:0000250|UniProtKB:Q04447}. Cell membrane. Note=Localizes to the mitochondria of thermogenic fat cells via the internal MTS-like signal (iMTS-L) region {ECO:0000250|UniProtKB:Q04447}

## **CKB / Creatine Kinase BB Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CKB / Creatine Kinase BB Antibody - Images



Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)

# CKB / Creatine Kinase BB Antibody - 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.

## CKB / Creatine Kinase BB Antibody - 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).