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

Goat Anti-CKB / Brain Creatine Kinase Antibody

Peptide-affinity purified goat antibody
Catalog # AF1245a

Specification

Goat Anti-CKB / Brain Creatine Kinase Antibody - Product Information

Application	**WB, E**
Primary Accession	P12277
Other Accession	NP_001814, 1152, 12709 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**42644**

Goat Anti-CKB / Brain Creatine Kinase Antibody - Additional Information

Gene ID 1152

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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-CKB / Brain Creatine Kinase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CKB / Brain Creatine Kinase 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: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}

Goat Anti-CKB / Brain Creatine Kinase Antibody - 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

Goat Anti-CKB / Brain Creatine Kinase Antibody - Images

AF1245a (0.1 µg/ml) staining of human brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CKB / Brain Creatine Kinase Antibody - Background

The protein encoded by this gene is a cytoplasmic enzyme involved in energy homeostasis. The encoded protein reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in brain as well as in other

tissues, and as a heterodimer with a similar muscle isozyme in heart. The encoded protein is a member of the ATP:guanido phosphotransferase protein family. A pseudogene of this gene has been characterized.

Goat Anti-CKB / Brain Creatine Kinase Antibody - References

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