

Creatine kinase B type Antibody

Rabbit mAb Catalog # AP91876

Specification

Creatine kinase B type Antibody - Product Information

Application WB, IHC, FC, ICC, IP

Primary Accession P12277
Reactivity Rat

Clonality Monoclonal

Other Names

BCK; Ckb; CKBB; HEL 211; HEL S 29;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 42644 Da

Creatine kinase B type Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Creatine kinase B type

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

Creatine kinase B type 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

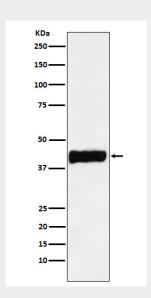
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q04447}. Mitochondrion {ECO:0000250|UniProtKB:Q04447}. Cell membrane. Note=Localizes to the mitochondria of thermogenic fat cells via the internal MTS-like signal (iMTS-L) region {ECO:0000250|UniProtKB:Q04447}

Creatine kinase B type 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

Creatine kinase B type Antibody - Images



Western blot analysis of Creatine kinase B type expression in SHSY5Y cell lysate.