

# Human Creatine kinase B/CKB antibody

Catalog Number: ATGA0426

## PRODUCT INFORMATION

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**Catalog number**

ATGA0426

**Clone No.**

AT8E4

**Product type**

Monoclonal Antibody

**UnitProt No.**

P12277

**NCBI Accession No.**

NP\_001814

**Alternative Names**

Creatine kinase B-type, Brain creatine kinase, Creatine kinase B chain, Creatine phosphokinase B-type, CPK-B, B-CK, CKBB

## PRODUCT SPECIFICATION

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human CKB (1-381aa) purified from E. coli

**Isotype**

IgG2a kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human Creatine kinase B/CKB antibody

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## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

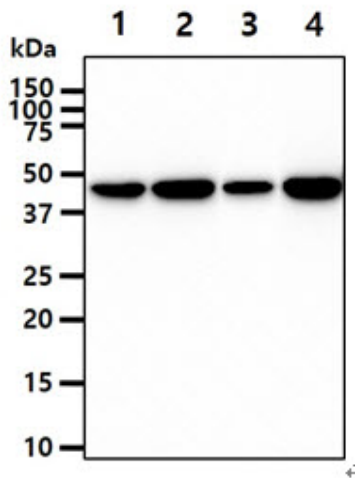
CKB (Creatine kinase B-type) is a cytoplasmic enzyme involved in energy homeostasis. The protein reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in brain as well as in other tissues, and as a heterodimer with a similar muscle isozyme in heart. Creatine kinases provide the energy of phosphate hydrolysis necessary to drive the normal function of many cellular systems including muscle, tumor and cancer cells.

### General References

Chang EJ., et al. (2008) Nat Med. 14(9): 966-72.  
Debrincat MA., et al. (2007) J Biol Chem. 282(7): 4728-37.

## DATA

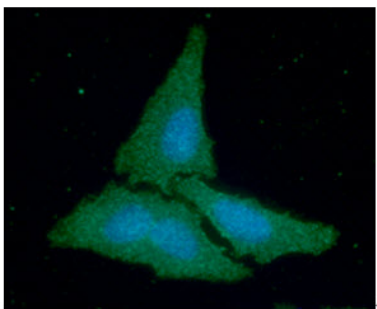
### Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CKB antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate  
Lane 2.: 293T cell lysate  
Lane 2.: K562 cell lysate  
Lane 2.: LnCap cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

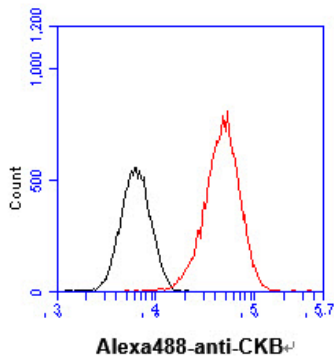


ICC/IF analysis of CKB in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human CKB antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

### Flow cytometry (FACS)

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Flow cytometry analysis of CKB in HeLa cell line, staining at 2-5ug for 1x10<sup>6</sup> cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).