

Human Creatine kinase B/CKB antibody

Catalog Number: ATGA0426

PRODUCT INFORMATION

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

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.

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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

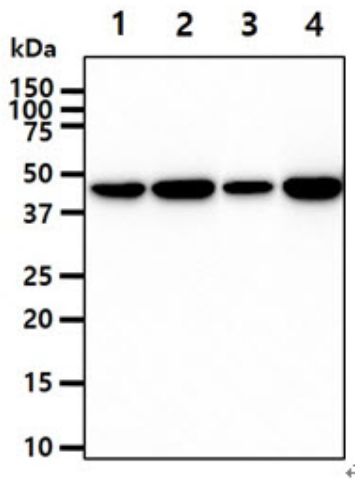
CKB (Creatine kinase B-type) is a cytoplasmic enzyme involved in energy homeostasis. The protein reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in brain as well as in other tissues, and as a heterodimer with a similar 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

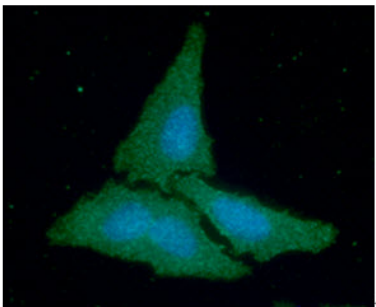
Western blot analysis (WB)



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)

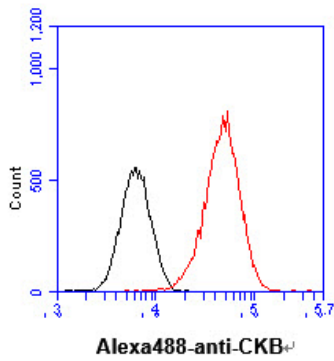


ICC/IF analysis of CKB in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human CKB antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

Flow cytometry (FACS)

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Flow cytometry analysis of CKB in HeLa cell line, staining at 2-5ug for 1x10⁶ cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).