Human beta-Actin antibody

Catalog Number: ATGA0606

PRODUCT INFORMATION

Catalog number
ATGA0606

Clone No.
AT4G6

Product type
Monoclonal Antibody

UnitProt No.
P60709

NCBI Accession No.
NP_001092

Alternative Names
Actin, cytoplasmic 1, Beta-actin

Additional Information
This product was produced from tissue culture supernatant.

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
0.2mg/ml (determined by BCA assay)

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

Immunogen
Recombinant human ACTB (1-375aa) purified from E. coli

Isotype
IgG1 kappa

Purification Note
By protein-A affinity chromatography

Application
ELISA, WB, ICC/IF

Usage
The antibody has been tested by ELISA, Western blot and ICC/IF analysis 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

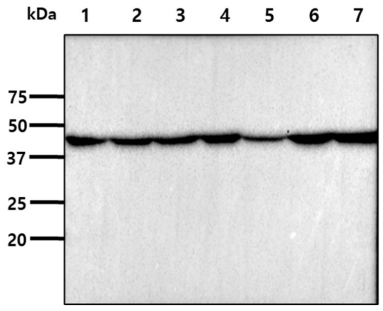
Beta-actin (human gene and protein symbol ACTB/ACTB) is one of six different actin isoforms which have been identified in humans. This is one of the two nonmuscle cytoskeletal actins. Actins are highly conserved proteins that are involved in cell motility, structure and integrity. Alpha actins are a major constituent of the contractile apparatus.

General References

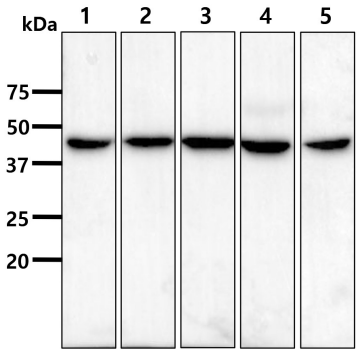
Gunning PW., et al. (2015) Journal of Cell Science. 128(11): 2009-2019.
Hanukoglu I., et al. (1983) Journal of Molecular Biology. 163(4): 673-8.

DATA

Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ACTB 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.: Jurkat cell lysate
Lane 3.: PC3 cell lysate
Lane 4.: HepG2 cell lysate
Lane 5.: MCF7 cell lysate
Lane 6.: U87-MG cell lysate
Lane 7.: NIH-3T3 cell lysate



The mouse tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ACTB antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Kidney tissue lysate
Lane 2.: Spleen tissue lysate
Lane 3.: Bone marrow tissue lysate
Lane 4.: Stomach tissue lysate
Lane 5.: Liver tissue lysate

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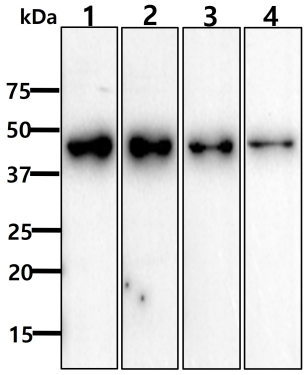
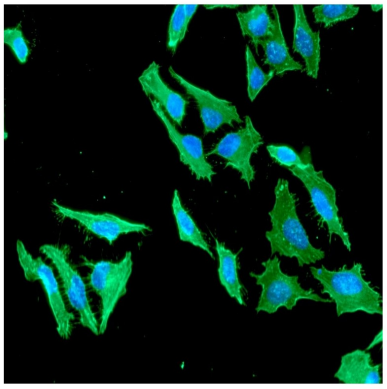


The HeLa cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ACTB antibody. Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: ACTB antibody 1:1000
Lane 2.: ACTB antibody 1:3000
Lane 3.: ACTB antibody 1:5000
Lane 4.: ACTB antibody 1:10000

Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of ACTB in HeLa cells. The cell was stained with ATGA0570 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).