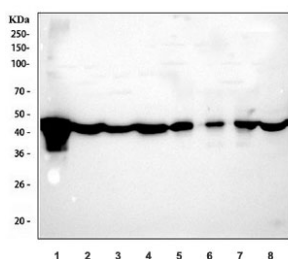


b-Actin Antibody / Beta Actin Antibody (R30971)

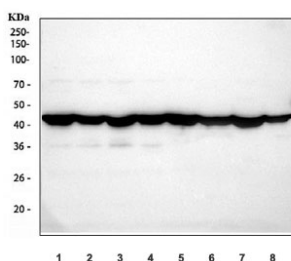
Catalog No.	Formulation	Size
R30971	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey, Zebrafish, Chicken
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P60709
Applications	Western Blot : 0.5-1ug/ml
Limitations	This b-Actin antibody is available for research use only.



Western blot testing of 1) zebrafish, 2) chicken heart, 3) chicken liver, 4) chicken brain, 5) monkey heart, 6) monkey lung, 7) monkey kidney and 8) monkey liver tissue lysate with b-Actin antibody. Predicted molecular weight ~48 kDa.



Western blot testing of 1) human HeLa, 2) human K562, 3) human MCF7, 4) human Jukrat, 5) rat brain, 6) rat kidney, 7) mouse brain and 8) mouse kidney tissue lysate with b-Actin antibody. Predicted molecular weight ~48 kDa.

Description

b-Actin (ACTB) is one of six different isoforms which have been identified in humans. This is one of the two nonmuscle cytoskeletal isoforms. Actins are highly conserved proteins that are involved in cell motility, structure and integrity. Ueyama et al.(1996) used fluorescence in situ hybridization to map ACTB to 7p22. By PCR of somatic cell hybrid DNAs, they mapped four ACTB pseudogenes to other chromosomes. Karakozova et al.(2006) found that arginylation of b-actin regulates cell motility. The majority of Ate1-null cells appeared smaller than wildtype cells and were apparently unable to form a lamella during movement along the substrate. Karakozova et al.(2006)concluded that arginylation of b-actin apparently represents a critical step in the actin N-terminal processing needed for functioning in vivo.

Application Notes

The stated application concentrations are suggested starting points. Titration of the b-Actin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 2-19 (DDDIAALVVDNGSGMCKA) were used as the immunogen for this b-Actin antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the b-Actin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.