

Rabbit beta Actin Polyclonal Antibody | anti-ACTB antibody

beta Actin Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328231	Rabbit	Human, Mouse, Rat, Pig, Zebrafish, Dog, Monkey, Fish Predicted: Bovine, Horse, Sheep, Rabbit, Chicken, Xenopus	Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

beta Actin; Polyclonal Antibody; beta Actin Antibody; Actin; cytoplasmic 1; Beta-actin; Beta actin; BRWS1; beta actin; b actin; Actin beta; Beta cytoskeletal actin; PS1TP5-binding protein 1; PS1TP5BP1; anti-ACTB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Pig, Zebrafish, Dog, Monkey, Fish Predicted: Bovine, Horse, Sheep, Rabbit, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Beta actin antibody detects endogenous levels of total Beta actin.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	375
Applicable Applications for anti-ACTB antibody	ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Beta actin.
Subcellular Location	Cytoskeleton
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from various samples, using beta Actin Antibody. Lane 1: 3T3 treated with blocking peptide; Lane 2: 3T3; Lane 3: COS-7.



WB (Western Blot)

Western blot analysis of extracts of NIH/3T3 (1), Jurkat (2), rat brain (3), rat liver (4), PC12 (5) lysates, using Beta-actin Antibody



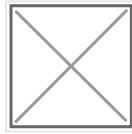
IHC (Immunohistochemisry)

At 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary



IF (Immunofluorescence)

At 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody , diluted at 1/600 was used as secondary antibod



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ADDITIONAL INFORMATION

Related Product Information for anti-ACTB antibody

Description: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

Post Translational Modifications: ISGylated. Oxidation of Met-44 and Met-47 by MICALs (MICAL1, MICAL2 or MICAL3) to form methionine sulfoxide promotes actin filament depolymerization. MICAL1 and MICAL2 produce the (R)-S-oxide form. The (R)-S-oxide form is reverted by MSRB1 and MSRB2, which promote actin repolymerization (By similarity). Monomethylation at Lys-84 (K84me1) regulates actin-myosin interaction and actomyosin-dependent processes. Demethylation by ALKBH4 is required for maintaining actomyosin dynamics supporting normal cleavage furrow ingression during cytokinesis and cell migration.(Microbial infection) Monomeric actin is cross-linked by V. cholerae toxins RtxA and VgrG1 in case of infection: bacterial toxins mediate the cross-link between Lys-50 of one monomer and Glu-270 of another actin monomer, resulting in formation of highly toxic actin oligomers that cause cell rounding (PubMed:19015515). The toxin can be highly efficient at very low concentrations by acting on formin homology family proteins: toxic actin oligomers bind with high affinity to formins and adversely affect both nucleation and elongation abilities of formins, causing their potent inhibition in both profilin-dependent and independent manners (PubMed:26228148).

Subunit Structure: Interacts with CPNE1 (via VWFA domain) and CPNE4 (via VWFA domain) (By similarity). Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4 others. Identified in a IGF2BP1-dependent mRNP granule complex containing untranslated mRNAs. Component of the BAF complex, which includes at least actin (ACTB), ARID1A, ARID1B/BAF250, SMARCA2, SMARCA4/BRG1, ACTL6A/BAF53, ACTL6B/BAF53B, SMARCE1/BAF57 SMARCC1/BAF155, SMARCC2/BAF170, SMARCB1/SNF5/INI1, and one or more of SMARCD1/BAF60A, SMARCD2/BAF60B, or SMARCD3/BAF60C. In muscle cells, the BAF complex also contains DPF3. Found in a complex with XPO6, Ran, ACTB and PFN1. Interacts with XPO6 and EMD. Interacts with ERBB2. Interacts with GCSAM. Interacts with TBC1D21 (By similarity). Interacts with DHX9 (via C-terminus); this interaction is direct and mediates the attachment to nuclear ribonucleoprotein complexes (PubMed:11687588).

Similarity: Belongs to the actin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4501885
NCBI GeneID	60
NCBI Accession #	NP_001092.1
NCBI GenBank Nucleotide #	NP_001092.1
UniProt Accession #	P60709

Molecular Weight	Observed: 43 kDa Predicted: 42 kDa
NCBI Official Full Name	actin, cytoplasmic 1
NCBI Official Synonym Full Names	actin beta
NCBI Official Symbol	ACTB
NCBI Official Synonym Symbols	BRWS1; PS1TP5BP1
NCBI Protein Information	actin, cytoplasmic 1
UniProt Protein Name	Actin, cytoplasmic 1
UniProt Gene Name	ACTB
UniProt Entry Name	ACTB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/beta-actin-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/328231>