

Rabbit beta-Actin ACTB Polyclonal Antibody | anti-ACTB antibody

Anti-beta-Actin ACTB Antibody Picoband (HRP)

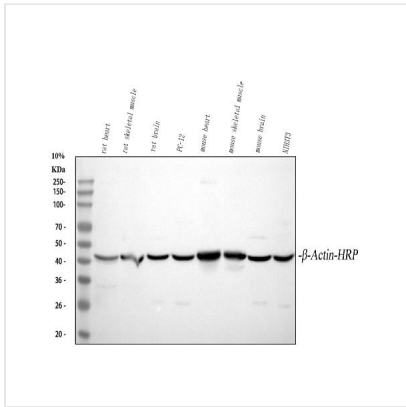
CATALOG # AAA127047	HOST Rabbit	REACTIVITY Chicken, Human, Monkey, Mouse, Rat, Zebrafish	APPLICATIONS Western Blot
-------------------------------	-----------------------	--	-------------------------------------

PRODUCT SYNONYMS

beta-Actin ACTB; Polyclonal Antibody; Anti-beta-Actin ACTB Antibody Picoband (HRP); Actin; beta; HRP-Actin; Beta-Actin; Beta actin; b actin; anti-ACTB antibody

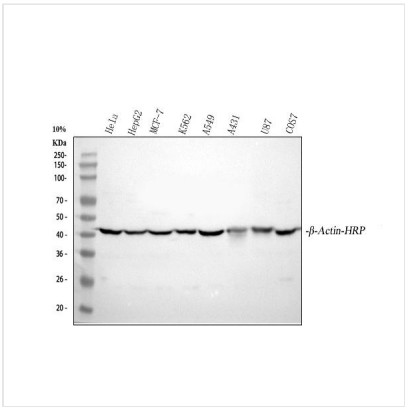
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Chicken, Human, Monkey, Mouse, Rat, Zebrafish
Clonality	Polyclonal
Isotype	IgG
Specificity	Widely expressed, with the highest expression in lung, spleen and thymus.
Purity/Purification	HRP-Beta-Actin antibody is affinity chromatography purified via peptide column.
Form/Format	Liquid. Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ .
Concentration	0.5mg/mL (varies by lot)
Applicable Applications for anti-ACTB antibody	WB (Western Blot)
Immunogen	HRP-Beta-Actin antibody was raised against a synthetic peptide containing 16 amino acids near the amino terminus of beta-actin.
Subcellular Localization	Cytoplasm, cytoskeleton
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Conjugation	HRP
Sequence Similarities	Belongs to the sodium:neurotransmitter symporter (SNF)(TC 2.A.22) family. SLC6A4 subfamily.
Cross Reactivity	HRP-Beta-Actin antibody is human, mouse, rat, rabbit, chicken, and drosophila reactive.
Protein Function	Actin is a highly conserved protein that polymerizes to produce filaments that form cross-linked networks in the cytoplasm of cells (PubMed:29581253). Actin exists in both monomeric (G- actin) and polymeric (F-actin) forms, both forms playing key functions, such as cell motility and contraction (PubMed:29581253). In addition to their role in the cytoplasmic cytoskeleton, G- and F-actin also localize in the nucleus, and regulate gene transcription and motility and repair of damaged DNA (PubMed:29925947).
Preparation and Storage	HRP-Beta-Actin antibody can be stored at 4 degree C for three months and -20 degree C, stable for up to one year.



WB (Western Blot)

Figure 2. Western blot analysis of beta-Actin using anti-beta-Actin antibody (AAA127047).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: rat heart tissue lysates,Lane 2: rat skeletal muscle tissue lysates,Lane 3: rat brain tissue lysates,Lane 4: rat PC-12 whole cell lysates,Lane 5: mouse heart tissue lysates,Lane 6: mouse skeletal muscle tissue lysates,Lane 7: mouse brain tissue lysates,Lane 8: mouse NIH/3T3 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-beta-Actin antigen affinity purified polyclonal antibody (#AAA127047) at 0.1ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for beta-Actin at approximately 42 kDa. The expected band size for beta-Actin is at 42 kDa.



WB (Western Blot)

Figure 1. Western blot analysis of beta-Actin using anti-beta-Actin antibody (AAA127047).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HeLa whole cell lysates,Lane 2: human HepG2 whole cell lysates,Lane 3: human MCF-7 whole cell lysates,Lane 4: human K562 whole cell lysates,Lane 5: human A549 whole cell lysates,Lane 6: human A431 whole cell lysates,Lane 7: human U87 whole cell lysates,Lane 8: monkey COS-7 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-beta-Actin antigen affinity purified polyclonal antibody (#AAA127047) at 0.1ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for beta-Actin at approximately 42 kDa. The expected band size for beta-Actin is at 42 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-ACTB antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-ACTB antibody	Primary Antibodies; Biochemicals; Chemical Type

NCBI AND UNIPROT INFORMATION

NCBI GI #	4501885
NCBI GeneID	60
NCBI Accession #	NP_001092.1
NCBI GenBank Nucleotide #	NM_001101.3
UniProt Accession #	P60709; P02570; P70514; P99021; Q11211; Q64316; Q75MN2; Q96B34; Q96HG5
Molecular Weight	375
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; beta cytoskeletal actin; PS1TP5-binding protein 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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/beta-actin-actb-antibody-western-blot-elisa/127047>