bs-0061R **[Primary Antibody]**

beta-Actin Rabbit pAb, Loading Control

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 60 **SWISS:** P60709

Target: beta-Actin

Immunogen: Synthetic MAP peptide derived from human beta-Actin: 1-200/375.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Actin is a highly conserved protein and an essential component of cell cytoskeleton and plays an important role in cytoplasmic streaming, cell shape determination, cell division, organelle movement and extension growth. Preferentially expressed in young and expanding tissues, floral organ primordia, developing seeds and emerging inflorescence. Antibodies against plant Actin are useful as loading controls for Western Blotting.

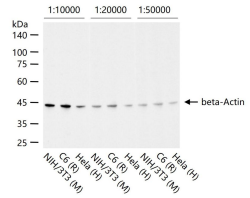
Applications: **WB** (1:5000-50000)
IHC-P (1:200-1000)
IHC-F (1:200-1000)
IF (1:200-1000)
Flow-Cyt (1μg/Test)
ICC/IF (1:100-500)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Pig, Sheep, Chicken, Dog, Cat, Hamster, GuineaPig, Fish, Bee)

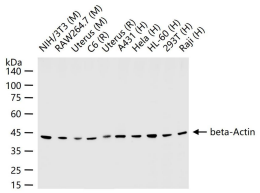
Predicted MW.: 42 kDa

Subcellular Location: Cytoplasm

VALIDATION IMAGES



25 ug total protein per lane of various lysates (see on figure) probed with beta-Actin polyclonal antibody, unconjugated (bs-0061R) at 1:10000-1:50000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



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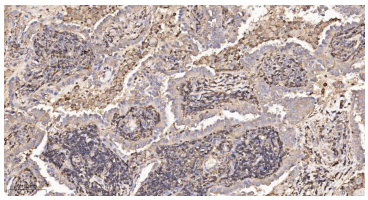
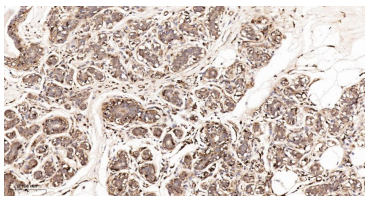
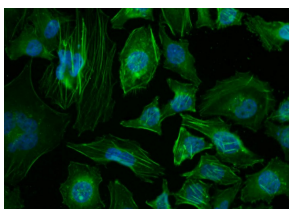


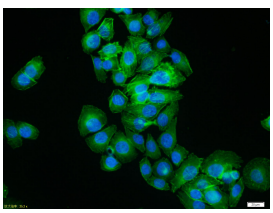
Paraformaldehyde-fixed, paraffin embedded Human Lung Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with beta-Actin Polyclonal Antibody, Unconjugated (bs-0061R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



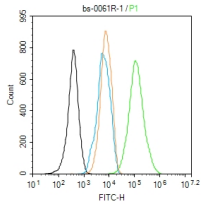
Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with beta-Actin Polyclonal Antibody, Unconjugated (bs-0061R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



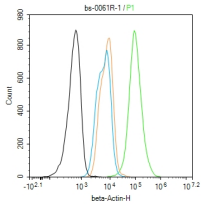
Tissue/cell: Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (beta-Actin) polyclonal Antibody, Unconjugated (bs-0061R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG-FITC antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (beta-Actin) polyclonal Antibody, Unconjugated (bs-0061R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control: NIH/3T3. Primary Antibody (green line): Rabbit Anti-beta-Actin (Loading Control) antibody (bs-0061R) Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



The Hela (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C,the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.), followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Rabbit Anti-beta-Actin antibody (bs-0061R): 1 µg/10^6 cells; Isotype Control (orange): Rabbit IgG (bs-0295P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=20.042]** Xiang-Qian Gao. et al. The piRNA CHAPIR regulates cardiac hypertrophy by controlling METTL3-dependent N 6 -methyladenosine methylation of Parp10 mRNA. Nat Cell Biol. 2020 Oct;22(11):1319-1331 WB ;Mouse. 33020597
- **[IF=19]** Xuan Thien Le. et al. Peroxidase-Mimicking Iron-Based Single-Atom Upconversion Photocatalyst for Enhancing Chemodynamic Therapy. ADV FUNCT MATER. 2024 May;:2401893 WB ;Mouse. 10.1002/adfm.202401893
- **[IF=19.227]** Xin Zhou. et al. ACSL4 promotes microglia-mediated neuroinflammation by regulating lipid metabolism and VGLL4 expression. BRAIN BEHAV IMMUN. 2023 Mar;109:331 WB ;Mouse. 36791893
- **[IF=19]** Hongkun Miao. et al. Antibody-Programmable Bimetallic Nanozymes for Transcriptional Blockade Therapy in HER2/ER-Positive Breast Cancer. ADV FUNCT MATER. 2025 Jun;:2508310 WB ;Mouse,Human. 10.1002/adfm.202508310
- **[IF=18.027]** Nguyen Thi Nguyen. et al. Amplified Fenton-Based Oxidative Stress Utilizing Ultraviolet Upconversion Luminescence-Fueled Nanoreactors for Apoptosis-Strengthened Ferroptosis Anticancer Therapy. ACS NANO. 2022;XXXX(XXX):XXX-XXX WB ;Mouse. 36579941