10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Actin (ACTB/ACTC) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1491a

## Product Information

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| **Application** | WB, IHC-P, IF, E |
| **Primary Accession** | P68032 |
| **Other Accession** | P60010, P68136, P68135, P68137, P68134, P68133, P68139, P68138, P63269, P63268, P63267, P63270, Q5E9B5, A2BDB0, P63259, P63260, P63261, Q5ZMQ2, P63258, P04751, P68035, P68033, P68034, Q3ZC07, O93400, P60711, P29751, Q6QAQ1, P60710, Q4R561, P60709, P48975 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Rat, Rabbit, Zebrafish, Hamster, Monkey, Pig, Chicken, Bovine, Drosophila, C.Elegans, Xenopus, Yeast, Canine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 42019 |
| **Antigen Region** | 38-67 |

## Additional Information

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| **Gene ID** | 70 |
| **Other Names** | Actin, alpha cardiac muscle 1, Alpha-cardiac actin, ACTC1, ACTC |
| **Target/Specificity** | This Actin (ACTB/ACTC) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-67 amino acids from the N-terminal region of human Actin (ACTB/ACTC). |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | Actin (ACTB/ACTC) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ACTC1 |

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| **Synonyms** | ACTC |
| **Function** | Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. |
| **Cellular Location** | Cytoplasm, cytoskeleton. |

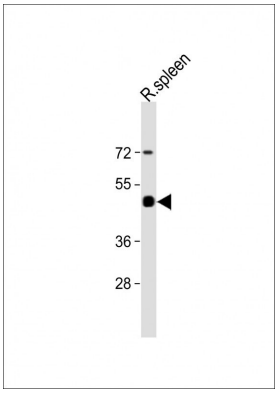
## Background

Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. ACTB/ACTC are nonmuscle cytoskeletal actins and major constituents of the contractile apparatus. Defects in ACTB are a cause of juvenile-onset dystonia. Defects in ACTC have been associated with idiopathic dilated cardiomyopathy (IDC) and familial hypertrophic cardiomyopathy (FHC).

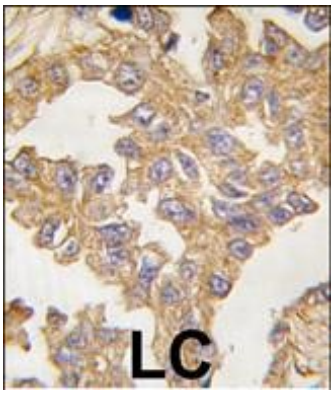
## References

Villebeck,L., Biochemistry 46 (44), 12639-12647 (2007) Avizienyte,E., Exp. Cell Res. 313 (15), 3175-3188 (2007) Bouldin,A.A., Muscle Nerve 35 (2), 254-258 (2007)

## Images

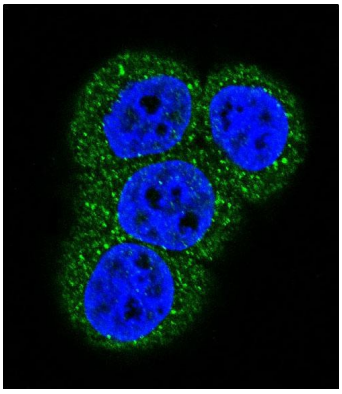



All lanes: Anti-ACTB/ACTC Antibody (N-term) at 1:1000 dilution rat spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 42KDa Blocking/Dilution buffer: 5% NFDM/TBST.




Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with ACTB/ACTC antibody (N-term) (Cat.#AP1491a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of Actin (ACTB/ACTC) Antibody (N-term)(Cat#AP1491a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).



## Citations

- Inherited human OX40 deficiency underlying classic Kaposi sarcoma of childhood.
- Pituitary tumor transforming gene PTTG2 induces psoriasis by regulating vimentin and E-cadherin expression.
- Transient Activation of Reprogramming Transcription Factors Using Protein Transduction Facilitates Conversion of Human Fibroblasts Toward Cardiomyocyte-Like Cells.
- Synthesis and in vitro/in vivo anti-cancer evaluation of curcumin-loaded chitosan/poly(butyl cyanoacrylate) nanoparticles.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.