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

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

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

Name	ACTC1

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.

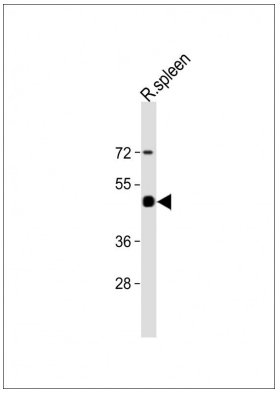
Background

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).

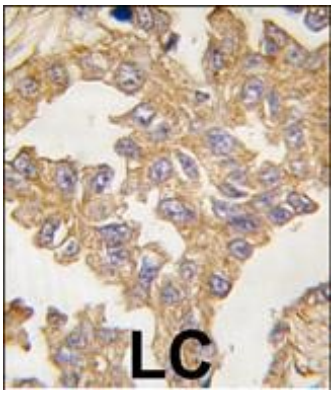
References

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

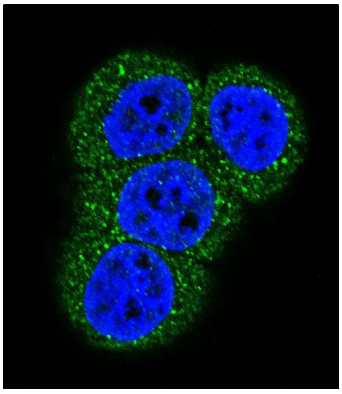


All lanes: Anti-ACTB/ACTC Antibody (N-term) at 1:1000 dilution rat spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 42KDa Blocking/Dilution buffer: 5% NFDM/TBST.



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'.