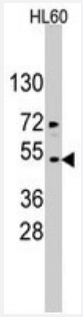
ACTB/ACTC1 polyclonal antibody

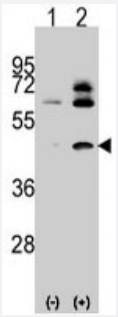
Catalog # PAB3161 Size 400 uL

Applications



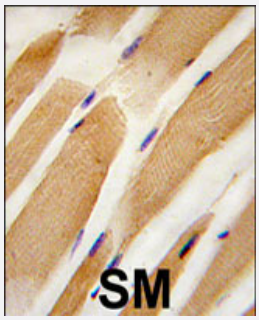
Western Blot (Cell lysate)

Western blot analysis of ACTB/ACTC1 polyclonal antibody (Cat # PAB3161) in HL-60 cell line lysates (35 ug/lane). ACTB/ACTC1 (arrow) was detected using the purified polyclonal antibody.



Western Blot (Transfected lysate)

Western blot analysis of ACTB/ACTC (arrow) using rabbit ACTB/ACTC1 polyclonal antibody (Cat # PAB3161). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ACTB/ACTC gene (Lane 2) (Origene Technologies).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with ACTB/ACTC1 polyclonal antibody (Cat # PAB3161) , 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.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ACTB/ACTC1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to internal region of human ACTB/ACTC1.

Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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Gene Info — ACTB

Entrez GeneID	60
Protein Accession#	NP_001092 (Gene ID : 60);P60709 (Gene ID : 60);NP_005150 (Gene ID : 70);P68032 (Gene ID : 70)
Gene Name	ACTB
Gene Alias	PS1TP5BP1

Gene Description	actin, beta
Omim ID	102630
Gene Ontology	Hyperlink
Gene Summary	This gene encodes one of six different actin proteins. Actins are highly conserved proteins that ar e involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins. [provided by RefSeq
Other Designations	PS1TP5-binding protein 1|actin, cytoplasmic 1|beta actin|beta cytoskeletal actin

Gene Info — ACTC1

Entrez GeneID	70
Protein Accession#	NP_001092 (Gene ID : 60);P60709 (Gene ID : 60);NP_005150 (Gene ID : 70);P68032 (Gene ID : 70)
Gene Name	ACTC1
Gene Alias	ACTC, CMD1R, CMH11
Gene Description	actin, alpha, cardiac muscle 1
Omim ID	102540 192600
Gene Ontology	Hyperlink
Gene Summary	Actins are highly conserved proteins that are involved in various types of cell motility. Polymerizati on of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded h elix. Each actin can bind to four others. The protein encoded by this gene belongs to the actin fam ily which is comprised of three main groups of actin isoforms, alpha, beta, and gamma. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. Defect s in this gene have been associated with idiopathic dilated cardiomyopathy (IDC) and familial hyp ertrophic cardiomyopathy (FHC). [provided by RefSeq
Other Designations	cardiac muscle alpha actin 1

Publication Reference

- Domain-specific chaperone-induced expansion is required for beta-actin folding: a comparison of beta-actin conformations upon interactions with GroEL and tail-less complex polypeptide 1 ring complex (TRiC).

  Villebeck L, Moparthi SB, Lindgren M, Hammarstrom P, Jonsson BH.

  Biochemistry 2007 Nov; 46(44):12639.

- An active Src kinase-beta-actin association is linked to actin dynamics at the periphery of colon cancer cells.

  Avizienyte E, Keppler M, Sandilands E, Brunton VG, Winder SJ, Ng T, Frame MC.

  Experimental Cell Research 2007 Sep; 313(15):3175.

  Application: IP, WB, Human, KM12C cells

- Variable presentation of nemaline myopathy: novel mutation of alpha actin gene.

  Bouldin AA, Parisi MA, Laing N, Patterson K, Gospe SM Jr.

  Muscle & Nerve 2007 Feb; 35(2):254.

Pathway

- Adherens junction
- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- Cardiac muscle contraction
- Focal adhesion
- Hypertrophic cardiomyopathy (HCM)
- Hypertrophic cardiomyopathy (HCM)
- Leukocyte transendothelial migration
- Pathogenic Escherichia coli infection - EHEC
- Regulation of actin cytoskeleton
- Tight junction
- Vibrio cholerae infection

Disease

- Breast cancer
- Breast Neoplasms
- Cardiomegaly
- Cardiomyopathies
- Cardiomyopathy
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Myopia