

ACTB polyclonal antibody

Catalog # PAB9980

Size 200 ug

Applications

Western Blot

Western blot using ACTB polyclonal antibody (Cat # PAB9980) shows detection of a predominant band at ~42 KDa corresponding to ACTB (arrowhead) in various lysates.

Lysates are as follows : HEK 293 (Lane 2), human lung carcinoma A-549 (Lane 3) and mouse brain (Lane 4) all using the 800 nm channel (green).

Approximately 35 ug of each lysate was separated on a 4-20% Tris-glycine gel by SDS-PAGE and transferred onto nitrocellulose.

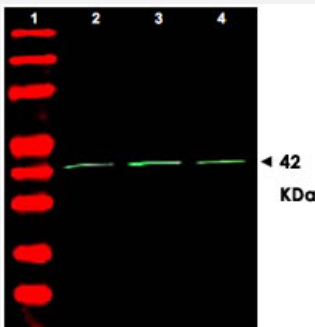
After blocking the membrane was probed with the primary antibody diluted to 1 : 1,500.

Incubation was overnight at 4°C followed by washes and reaction with a 1 : 10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] MX for 45 min at room temperature.

Molecular weight markers are shown in lane 1 using the 700 nm channel (red).

IRDye™800 fluorescence image was captured using the Odyssey u Infrared Imaging System developed by LI-COR.

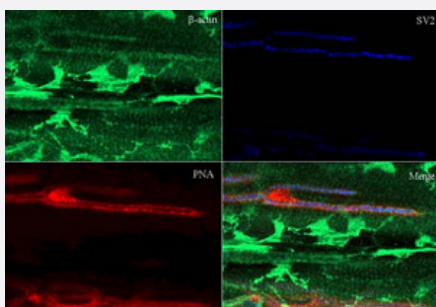
IRDye is a trademark of LI-COR, Inc.



Immunofluorescence

Immunofluorescence staining of ACTB polyclonal antibody (Cat # PAB9980) at 1 : 200 is shown to detect actin at the neuromuscular junction of rana pipiens tissue (sections 4.2 um thick).

Personal Communication. S. Moeckel-Cole, Univ. MA, Amherst, MA.



Specification

Product Description

Rabbit polyclonal antibody raised against synthetic peptide of ACTB.

Immunogen	A synthetic peptide corresponding to amino acids 359-368 of human ACTB.
Host	Rabbit
Reactivity	Human
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:10000-1:40000) Western Blot (1:1000-1:4000) Immunofluorescence (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM potassium phosphate buffer, 150 mM NaCl, pH 7.2 (0.01% 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 should be handled by trained staff only.

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● Enzyme-linked Immunoabsorbent Assay

Gene Info — ACTB

Entrez GeneID	60
Protein Accession#	P60709;NP_001092
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 are 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

Publication Reference

- [A role for beta-actin in RNA polymerase III transcription.](#)

Hu P, Wu S, Hernandez N.

Genes & Development 2004 Dec; 18(24):2010.

Application: WB, Human, HeLa, IMR90 cells

- [Activation of the GLI oncogene through fusion with the beta-actin gene \(ACTB\) in a group of distinctive pericytic neoplasms: pericytoma with t\(7;12\).](#)

Dahlén A, Fletcher CD, Mertens F, Fletcher JA, Perez-Atayde AR, Hicks MJ, Debiec-Rychter M, Sciort R, Wejde J, Wedin R, Mandahl N, Panagopoulos I.

The American Journal of Pathology 2004 May; 164(5):1645.

- [Proteomic identification of brain proteins that interact with dynein light chain LC8.](#)

Navarro-Lerida I, Martinez Moreno M, Roncal F, Gavilanes F, Albar JP, Rodriguez-Crespo I.

Proteomics 2004 Feb; 4(2):339.

Pathway

- [Adherens junction](#)
- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Focal adhesion](#)
- [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](#)