Datasheet for ABIN4906581

anti-beta Actin antibody (AA 1-25)

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Overview

Quantity:	100 µL
Target:	beta Actin (ACTB)
Binding Specificity:	AA 1-25
Reactivity:	Human, Mouse, Rat, Pig, Cow
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This beta Actin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human beta-Actin
Clone:	1A2
Isotype:	IgG
Specificity:	The immunogen of this antibody has sequence similarity to actin cytoplasmic 2 and beta-actin-like protein 2, and may bind to these targets.
Cross-Reactivity:	Cow, Human, Mouse, Pig, Rat
Purification:	Purified by Protein G.

Target Details

Target:	beta Actin (ACTB)

Target Details

Alternative Name:	beta-Actin (ACTB Products)
Background:	Synonyms: Actin, cytoplasmic 1, ACTB Background: Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
Gene ID:	60
UniProt:	P60709
Pathways:	Myometrial Relaxation and Contraction, Cell-Cell Junction Organization, Maintenance of Protein Location, Phototransduction

Application Details

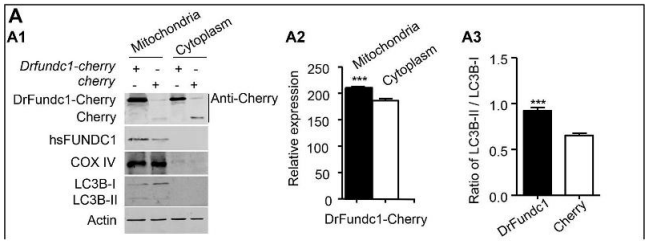
Application Notes:	WB 1:300-5000 IHC-P 1:200-400
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

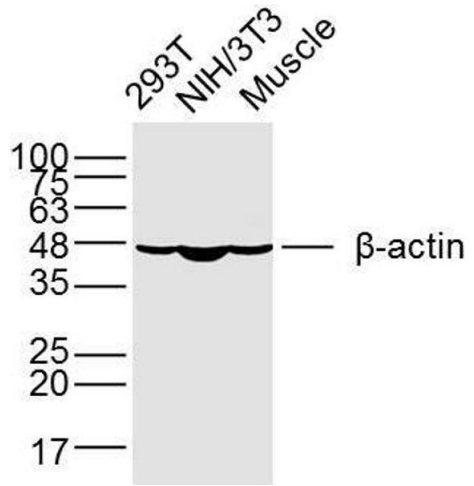
Publications

Product cited in:	Chen, Chen, Liang, Ba: "Administration of Repetitive Transcranial Magnetic Stimulation Attenuates Aβ 1-42-Induced Alzheimer's Disease in Mice by Activating β-Catenin Signaling." in: **BioMed research international**, Vol. 2019, pp. 1431760, (2019) (PubMed).



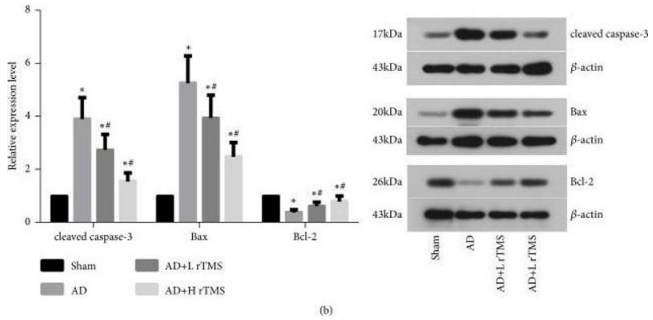
Western Blotting

Image 1. DrFundc1 reduced cell viability while inducing autophagy and apoptosis in transgenic 293T cells. (A) Western blotting of proteins extracted from mitochondria and cytoplasm from transgenic 293T cells transfected with pCS2+-Drfundc1-Cherry-His as well as pCS2+-Cherry plasmids. Antibodies used were anti-Cherry (detecting Drfundc1-Cherry-His and Cherry), anti-FUNDC1, anti-COX IV, anti-LC3B, and anti-β-ACTIN. (A1) Results of Western blotting. (A2) Gray-scale analyses of DrFundc1 using ImageJ in mitochondria and cytoplasm of cells transfected with pCS2+-Drfundc1-Cherry-His. (A3) LC3B-II:LC3B-I ratio in mitochondria of transgenic cells transfected with pCS2+-Drfundc1-Cherry-His and pCS2+-Cherry. (B) DrFundc1 decreased viability of 293T cells, measured by MTT assay. (C-D) DrFundc1 increased 293T cell mortality, measured by Trypan Blue staining. (E) DrFundc1 decreased cell proliferation in transgenic cells, detected using BrdU incorporation. (F) DrFundc1 led to apoptosis of 293T cells, detected using TUNEL assay. Arrows show apoptotic cells. Red indicates DrFundc1-Cherry or Cherry, while green indicates TUNEL-positive cells. Positive control: Cherry+DNase I. Negative control: incubation without TdT enzyme. (G) Expressional fold change of autophagy- and apoptosis-related genes, detected using qRT-PCR. β-ACTIN was used as an internal control. Significant differences between cells transfected with different plasmids are shown as asterisks. *P<0.05, **P<0.01, ***P<0.001. - figure provided by CiteAb. Source: PMID31827208



Western Blotting

Image 2. Lane 1: 293T, Lane 2: NIH/3T3, Lane 3: mouse muscle lysates probed with beta-Actin (1A2) Monoclonal Antibody (bsm-33036M) at 1:300 overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.



Western Blotting

Image 3. Effect of rTMS on apoptosis and viability of neurons in hippocampus regions of AD mice. AD symptoms were induced with intracranial injection of 3 μL Aβ1-42 (1 μ g/μl) and then treated with rTMS of 1Hz or 10Hz. Neuron apoptosis was detected with TUNEL staining and western blotting detection of cleaved caspase-3, Bax, and Bcl-2. Neuron viability was detected with immunochemical detection of doublecortin. (a) Representative images of TUNEL staining. (b) Quantitative analysis results and representative of western blotting detection. (c) Representative images of immunochemical detection of doublecortin. """" represents statistically significant different from Sham group, P < 0.05. ""#"" represents statistically significant different from AD group, P < 0.05. Scale bar, 200μ m. Each assay was represented by six replicates. - figure provided by CiteAb. Source: PMID30949496

Please check the product details page for more images. Overall 7 images are available for ABIN4906581.