

For Research Use Only

ACTN2 Recombinant antibody

Catalog Number: 85857-4-RR



Basic Information

Catalog Number: 85857-4-RR	GenBank Accession Number: BC051770	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 88	CloneNo.: 250229F6
Source: Rabbit	UNIPROT ID: P35609	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:250-1:1000
Isotype: IgG	Full Name: actinin, alpha 2	
Immunogen Catalog Number: AG5459	Calculated MW: 104 kDa	
	Observed MW: 103 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : HepG2 cells, A549 cells, HeLa cells, NIH/3T3 cells, C6 cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : mouse heart tissue, mouse skeletal muscle tissue
	IF/ICC : H9C2 cells,

Background Information

Alpha actinin 2 (ACTN2) belongs to the alpha-actinin family and is expressed in both skeletal and cardiac muscles, and functions to anchor myofibrillar actin thin filaments and titin to Z-discs (PMID: 30701273). ACTN2 is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. Mutations in ACTN2 are associated with hypertrophic cardiomyopathy, as well as dilated cardiomyopathy and endocardial fibroelastosis (PMID: 20022194, 14567970).

Storage

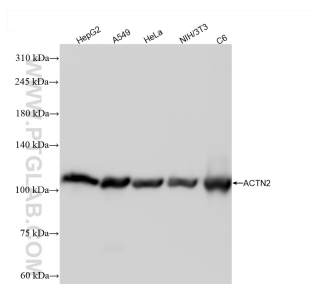
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

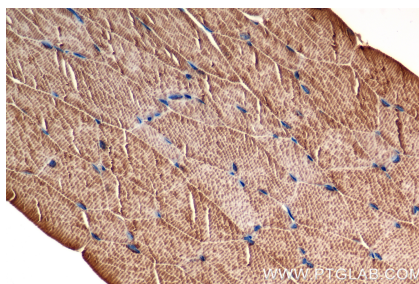
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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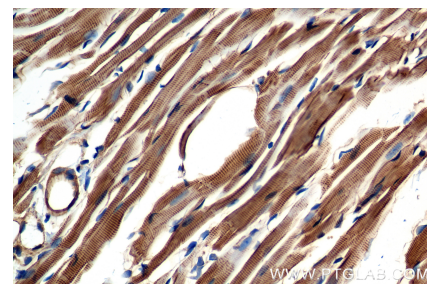
Selected Validation Data



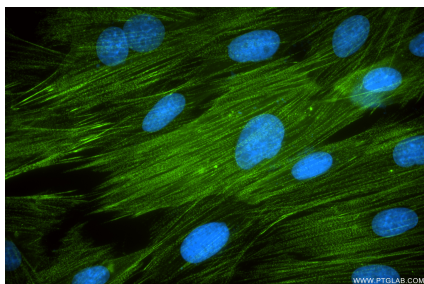
Various lysates were subjected to SDS PAGE followed by western blot with 85857-4-RR (ACTN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 85857-4-RR (ACTN2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 85857-4-RR (ACTN2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed H9C2 cells using ACTN2 antibody (85857-4-RR, Clone: 250229F6) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).