

For Research Use Only

ACTN2 Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number: 85857-4-PBS



Basic Information

Catalog Number: 85857-4-PBS	GenBank Accession Number: BC051770	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 88	CloneNo.: 250229F6
Isotype: IgG	UNIPROT ID: P35609	
Immunogen Catalog Number: AG5459	Full Name: actinin, alpha 2	
	Calculated MW: 104 kDa	
	Observed MW: 103 kDa	

Applications

Tested Applications:
WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

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 -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS only, pH7.3

For technical support and original validation data for this product please contact:

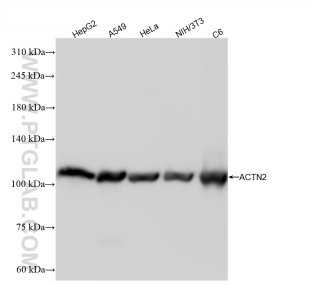
T: 4006900926

E: Proteintech-CN@ptglab.com

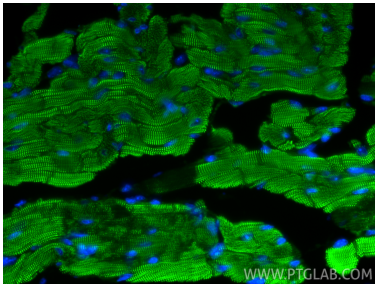
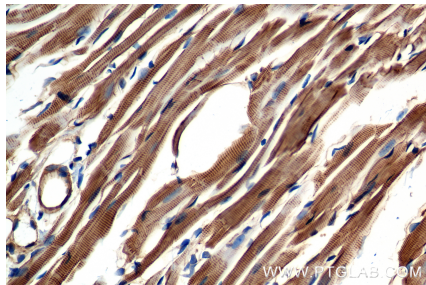
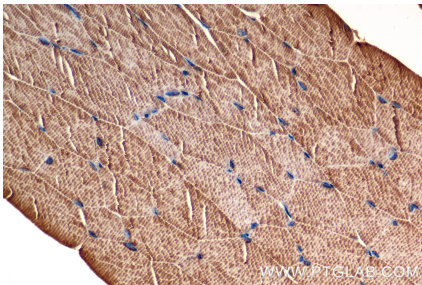
W: ptgcn.com

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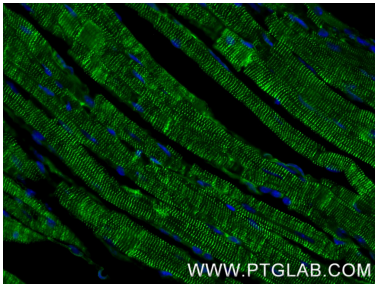
Selected Validation Data



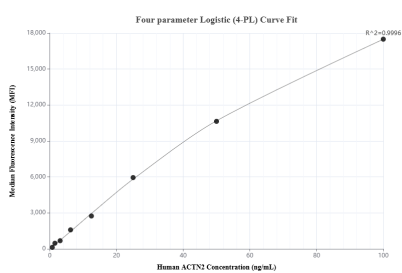
Various lysates were subjected to SDS PAGE followed by western blot with 85857-4-RR (ACTN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85857-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using ACTN2 antibody (85857-4-RR, Clone: 250229F6) at dilution of 1:2000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85857-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using ACTN2 antibody (85857-4-RR, Clone: 250229F6) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85857-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP02153-1, ACTN2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85857-4-PBS. Detection antibody: 85857-3-PBS. Standard: Ag5459. Range: 0.781-100 ng/mL