

For Research Use Only

ACTN2 Recombinant 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
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 88	CloneNo.: 250229F6
Source: Rabbit	UNIPROT ID: P35609	
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, Cytometric bead array, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

85857-4-PBS targets ACTN2 as part of a matched antibody pair:

MP02153-1: 85857-4-PBS capture and 85857-3-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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).

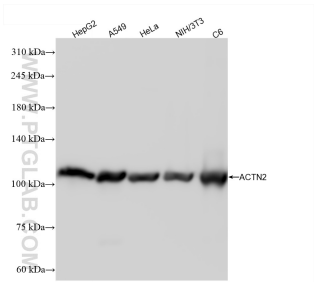
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

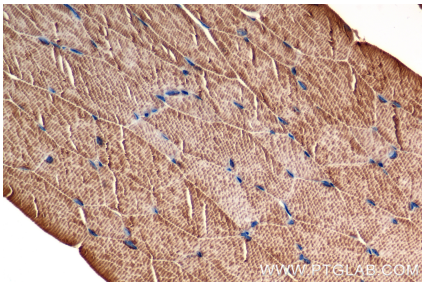
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

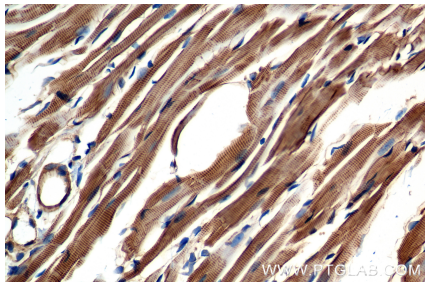
Selected Validation Data



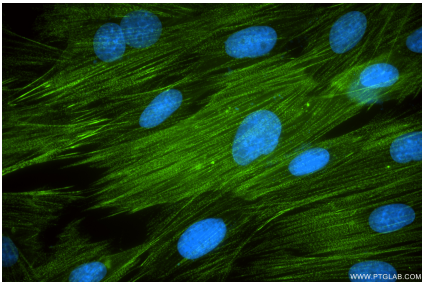
Various lysates were subjected to SDS PAGE followed by western blot with 85857-4-RR (ACTN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85857-4-PBS in a different storage buffer formulation.



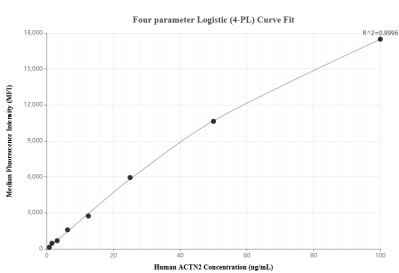
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 85857-4-RR (ACTN2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85857-4-PBS in a different storage buffer formulation.



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). 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 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). 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.