

For Research Use Only

# ACTN2 Monoclonal antibody

Catalog Number: 68223-1-Ig



## Basic Information

<b>Catalog Number:</b> 68223-1-Ig	<b>GenBank Accession Number:</b> BC051770	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 88	<b>CloneNo.:</b> 1D5F9
<b>Source:</b> Mouse	<b>Full Name:</b> actinin, alpha 2	<b>Recommended Dilutions:</b> WB 1:20000-1:100000
<b>Isotype:</b> IgG2b	<b>Calculated MW:</b> 104 kDa	
<b>Immunogen Catalog Number:</b> AG5578	<b>Observed MW:</b> 103 kDa	

## Applications

**Tested Applications:**  
WB, ELISA

**Species Specificity:**  
Human, mouse, rat, pig, rabbit

**Positive Controls:**  
WB : pig heart tissue, rat colon tissue, rabbit heart tissue, rat heart tissue, mouse heart tissue, pig colon tissue

## 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 pH 7.3.

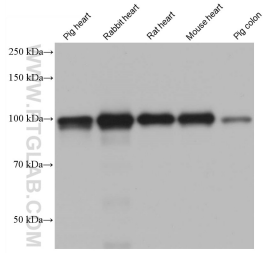
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

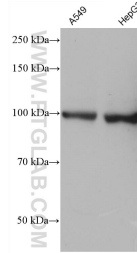
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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

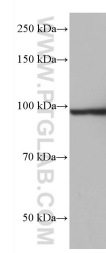
## Selected Validation Data



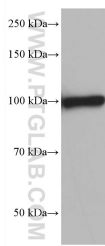
Various lysates were subjected to SDS PAGE followed by western blot with 68223-1-Ig (ACTN2 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



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HeLa cells were subjected to SDS PAGE followed by western blot with 68223-1-Ig (ACTN2 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



rat colon tissue were subjected to SDS PAGE followed by western blot with 68223-1-Ig (ACTN2 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.