

For Research Use Only

# CoraLite® Plus 488-conjugated ACTN2 Polyclonal antibody

Catalog Number: CL488-14221



## Basic Information

### Catalog Number:

CL488-14221

### Size:

100ul , Concentration: 1000 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5459

### GenBank Accession Number:

BC051770

### GeneID (NCBI):

88

### UNIPROT ID:

P35609

### Full Name:

actinin, alpha 2

### Calculated MW:

104 kDa

### Observed MW:

103 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

IF-P 1:50-1:500

IF/ICC 1:50-1:500

### Excitation/Emission maxima wavelengths:

493 nm / 522 nm

## Applications

### Tested Applications:

IF/ICC, IF-P

### Species Specificity:

human, mouse, rat

### Positive Controls:

IF-P : mouse heart 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. Avoid exposure to light. Stable for one year after shipment.

### Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

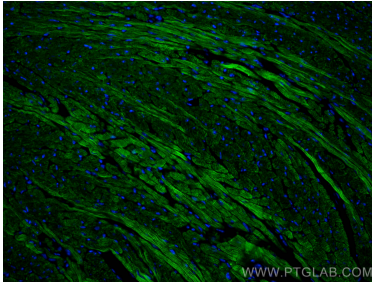
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

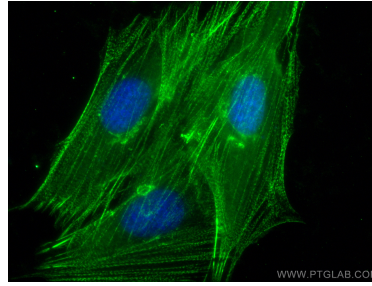
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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using CoraLite® Plus 488 ACTN2 antibody (CL488-14221) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed H9C2 cells using CoraLite® Plus 488 ACTN2 antibody (CL488-14221) at dilution of 1:200.