For Research Use Only

## CoraLite® Plus 488-conjugated ACTN2 Polyclonal antibody



Catalog Number: CL488-14221

**Basic Information** 

Catalog Number:

CL488-14221

1000 µg/ml

Source: Rabbit

Immunogen Catalog Number:

Isotype:

Species Specificity:

human, mouse, rat

GenBank Accession Number:

BC051770 GeneID (NCBI):

**UNIPROT ID:** 

P35609 Full Name: actinin, alpha 2

Calculated MW: 104 kDa

Observed MW: 103 kDa

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions: IF 1:50-1:500

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

**Applications** 

**Tested Applications:** 

IF/ICC,IF-P

Positive Controls:

IF: mouse heart tissue, 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 actinbinding 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).

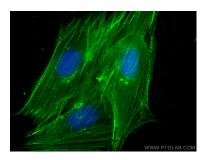
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

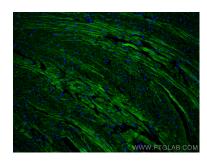
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



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



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).