

CoraLite® Plus 488-conjugated ACTN2 Polyclonal antibody

Catalog Number: **CL488-14221**

Basic Information

Catalog Number:

CL488-14221

Size:

1000 µg/ml

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:

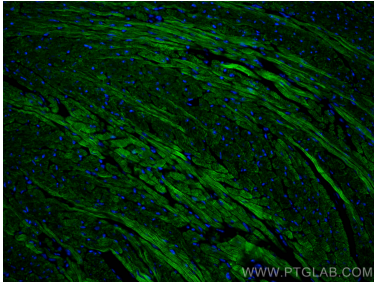
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

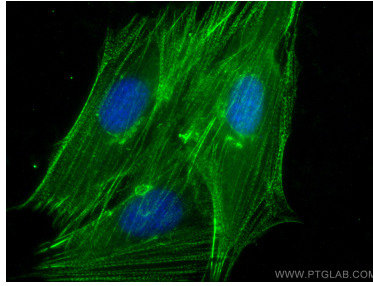
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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.