

CoraLite®594-conjugated ACTN2 Recombinant monoclonal antibody

Catalog Number: CL594-85857-4

Basic Information

Catalog Number: CL594-85857-4	GenBank Accession Number: BC051770	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 88	CloneNo.: 250229F6
Isotype: IgG	UNIPROT ID: P35609	Recommended Dilutions: IF-P: 1:500-1:2000
Immunogen Catalog Number: AG5459	Full Name: actinin, alpha 2	Excitation/Emission maxima wavelengths: 588 nm / 604 nm
	Calculated MW: 104 kDa	
	Observed MW: 103 kDa	

Applications

Tested Applications: IF-P	Positive Controls: IF-P : mouse heart tissue,
Species Specificity: human, mouse, rat	

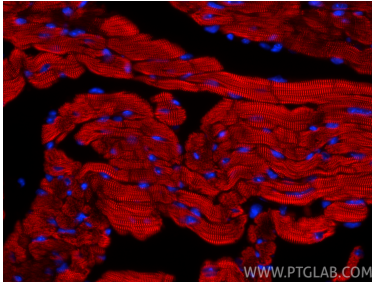
Background Information

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, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using CoraLite®594 ACTN2 antibody (CL594-85857-4, Clone: 250229F6) at dilution of 1:1000. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).