For Research Use Only

# CoraLite®594-conjugated Alpha cardiac muscle actin specific Monoclonal antibody

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Catalog Number: CL594-66125

1 Publications

**Basic Information** 

Catalog Number: CL594-66125 Concentration: 1000 ug/ml Source: Mouse

lgG1

Isotype:

GenBank Accession Number: NM 005159 GeneID (NCBI):

**UNIPROT ID:** 

P68032 Full Name:

actin, alpha, cardiac muscle 1 Calculated MW:

42 kDa

**Purification Method:** 

Protein G purification

CloneNo.: 1F2B9

Recommended Dilutions:

IF-P: 1:50-1:500

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

Excitation/Emission maxima wavelengths:

588 nm / 604 nm

**Applications** 

**Tested Applications:** IF-P, FC (Intra) Cited Applications:

Species Specificity: human, mouse, rat, pig

**Cited Species:** mouse

**Positive Controls:** 

IF-P: mouse heart tissue, FC (Intra): C2C12 cells,

## **Background Information**

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. The ACTC1 gene encodes cardiac muscle alpha-actin, the predominant actin isoform in adult heart, which interacts with a variety of proteins to produce the force for muscle contraction. This antibody is specific to the ACTC1. It does not cross-react with other actin isoforms. The antibody is conjugated with CL594, Ex/Em 593 nm/614 nm.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Wei Feng	40135575	J Am Heart Assoc	IF

## Storage

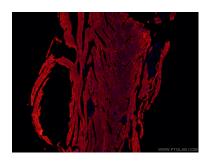
Storage:

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

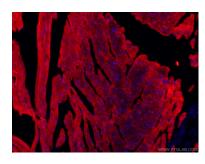
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

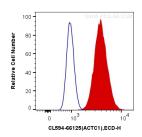
### **Selected Validation Data**



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CL594-66125 (ACTC1-specific antibody) at dilution of 1:100.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using CL594-66125 (ACTC1-specific antibody) at dilution of 1:100.



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human ACTC1-specific (CL594-66125, Clone:1F2B9) (red), or 0.4 ug Mouse 1gG1 Isotype Control (CL594-66360, Clone: T1F8D3F10) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).