# For Research Use Only

# ACTC1-specific Monoclonal antibody

Catalog Number:66125-1-lg 8 Publications



**Basic Information** 

Catalog Number: 66125-1-lg Size:

747 µg/ml Source: Mouse Isotype:

lgG1

42 kDa Observed MW:

42 kDa

GenBank Accession Number:

actin, alpha, cardiac muscle 1

NM\_005159

**UNIPROT ID:** 

Full Name:

Calculated MW:

P68032

GeneID (NCBI):

**Purification Method:** 

Protein A purification

CloneNo.: 1F2B9

Recommended Dilutions: WB 1:2500-1:10000 IHC 1:100-1:400 IF 1:200-1:800

**Applications** 

**Tested Applications:** FC, IF-P, IHC, WB, ELISA Cited Applications: IF, IHC, WB Species Specificity:

human, mouse, pig, rat

**Cited Species:** 

human, rat, mouse, rabbit

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

#### **Positive Controls:**

WB: human heart tissue, pig heart tissue, rat heart tissue, mouse heart tissue

IHC: human heart tissue, human heart and human skeletal muscle tissue

IF: mouse heart tissue.

# **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.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Jiang Yan	36087696	Eur J Pharmacol	WB,IF
Muyao Ye	34642907	Immunol Res	WB
Eric E Abrahamson	36411500	Amyloid	IF

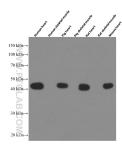
Storage

Store at -20°C. Stable for one year after shipment.

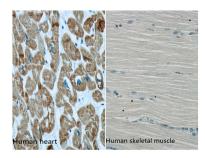
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



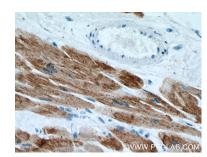
Various lysates were subjected to SDS PAGE followed by western blot with 66125-1-lg (ACTC1-specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours.



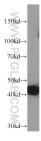
Immunohistochemical analysis of paraffinembedded human heart and human skeletal muscle using 66125-1-lg (ACTC1 specific antibody) at dilution 1:500. (under 40x lens).



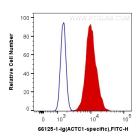
Immunohistochemical analysis of paraffinembedded human heart using 66125-1-lg(ACTC1-specific antibody) at dilution of 1:200 (under 10x lens).



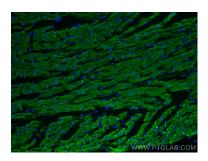
Immunohistochemical analysis of paraffinembedded human heart using 66125-1-1g(ACTC1-specific antibody) at dilution of 1:200 (under 40x lens).



human heart tissue were subjected to SDS PAGE followed by western blot with 66125-1-Ig (ACTC1-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human ACTC1-specific (66125-1-Ig, Clone:1F2B9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using ACTC1-specific antibody (66125-1-1g, Clone: 1F2B9) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).