For Research Use Only

ACTC1-specific Monoclonal antibody

Catalog Number:66125-1-lg 9 Publications



Basic Information

Catalog Number: 66125-1-lg

GenBank Accession Number: NM_005159

Purification Method: Protein A purification

Size

GeneID (NCBI):

CloneNo.:

150ul , Concentration: 747 ug/ml by

70

1F2B9

Bradford method using BSA as the standard;

UNIPROT ID: P68032 Recommended Dilutions:

Source:

68032

WB 1:2500-1:10000

Mouse

Full Name: actin, alpha, cardiac muscle 1

IHC 1:100-1:400 IF-P 1:200-1:800 IF-Fro 1:400-1:1600

Isotype: IgG1 Calculated MW:

42 kDa

Observed MW:

42 kDa

Applications

Tested Applications:

WB, IHC, IF-P, IF-Fro, FC (Intra), ELISA

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig

Cited Species:

human, mouse, rat, rabbit

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-Fro: mouse heart tissue,

retrieval may be performed with <mark>citrate</mark> buffer pH 6.0

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

Storage

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

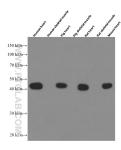
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

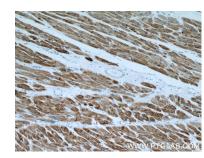
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

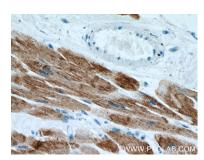
Selected Validation Data



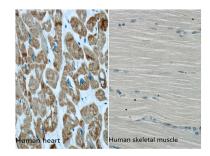
Various lysates were subjected to SDS PAGE followed by western blot with 66125-1-lg (ACTC 1-specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours.



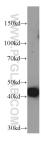
Immunohistochemical analysis of paraffinembedded human heart using 66125-1-Ig(ACTC1-specific antibody) at dilution of 1:200 (under 10x lens).



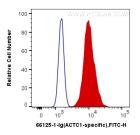
Immunohistochemical analysis of paraffinembedded human heart using 66125-1-lg(ACTC1-specific antibody) at dilution of 1:200 (under 40x lens)



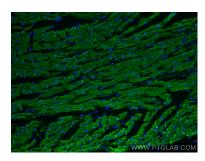
Immunohistochemical analysis of paraffinembedded human heart and human skeletal muscle using 66125-1-1g (ACTC1 specific antibody) at dilution 1:500. (under 40x lens).



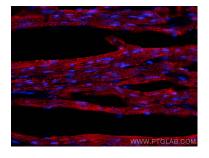
human heart tissue were subjected to SDS PAGE followed by western blot with 66125-1-Ig (ACTC1-specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human ACTC1-specific (66125-1-lg, 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).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse heart tissue using ACTC1-specific antibody (66125-1-1g, Clone: 1F2B9) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM004).