For Research Use Only

CoraLite® Plus 647-conjugated Alpha smooth muscle actin specific Monoclonal antibody



Catalog Number: CL647-67735 4 Publications

Basic Information

Catalog Number: CL647-67735 Concentration: 1000 ug/ml Source:

Mouse Isotype:

lgG1

GenBank Accession Number:

NM_001613 GeneID (NCBI): 59 UNIPROT ID: P62736

Full Name: actin, alpha 2, smooth muscle, aorta

Calculated MW: 42 kDa Observed MW: 42 kDa Purification Method:

Protein G purification CloneNo.:

1E9A11

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: 654 nm / 674 nm

Applications

Tested Applications: IF-P, FC (Intra) Cited Applications: IF, FC (Intra) Species Specificity: human, mouse, rat, pig Cited Species:

human, mouse

Positive Controls:

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

Background Information

ACTA2 (also known as $\,^{\alpha}$ -smooth muscle actin or $\,^{\alpha}$ -SMA) belongs to the actin family. Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. ACTA2 is primarily expressed in vascular smooth muscle and anti-ACTA2 is commonly used to marker smooth muscle cells.

Notable Publications

Author	Pubmed ID	Journal	Application
Chang Liu	38896792	Adv Sci (Weinh)	
Shiqi Gao	38237739	Lab Invest	IF
Chuxiang Lei	37660071	Nat Commun	FC

Storage

Storage

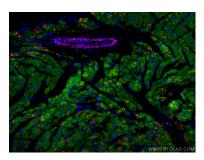
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

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

Aliquoting is unnecessary for -20°C storage

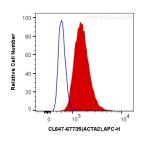
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Coralite® Plus 647 smooth muscle actin specific antibody (CL647-67735, Clone: 1E9A11) at dilution of 1:100, Coralite® 488 Cardiac Troponin I antibody (CL488-66376, Clone: 1D5D6, green), Coralite® 594 N-cadherin antibody (CL594-22018, red). DAPI (blue).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Coralite® Plus 647 smooth muscle actin specific antibody (CL647-67735, Clone: 1E9A11) at dilution of 1:200.



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug CoraLite® Plus 647 Anti-Human smooth muscle actin specific (CL647-67735, Clone:1E9A11) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).