For Research Use Only

CoraLite® Plus 488-conjugated Alpha smooth muscle actin specific Recombinant antibody



Catalog Number: CL488-80008

Featured Product

Basic Information

Catalog Number: CL488-80008 Concentration: 1000 ug/ml

Rabbit Isotype: IgG

Source:

IgG

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 A purification

CloneNo.: 5H7

Recommended Dilutions: IF-P: 1:50-1:500 IF-Fro: 1:50-1:500 IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10⁶ cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications: IF/ICC, IF-P, IF-Fro, FC (Intra)

Species Specificity:

human, mouse, rat, pig, chicken

Positive Controls:

IF-P: mouse heart tissue,

IF-Fro: mouse small intestine tissue,

IF/ICC: H9C2 cells,
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.

Storage

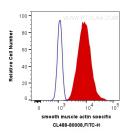
Storage:

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

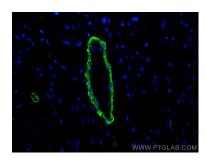
Selected Validation Data



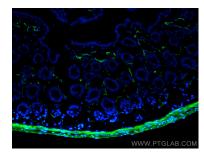
1X10^6 C2C12 cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human smooth muscle actin specific (CL488-80008, Clone:5H7) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



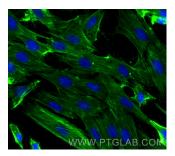
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Coralite® Plus 488 smooth muscle actin specific antibody (CL488-80008, Clone: 5H7) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Coralite® Plus 488 smooth muscle actin specific antibody (CL488-80008, Clone: 5H7) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using Coralite® Plus 488 Alpha smooth muscle actin specific antibody (CL488-80008, Clone: 5H7) at dilution of 1:200.



Immunofluorescent analysis of (-20°C Ethanol) fixed H9C2 cells using CoraLite® Plus 488 smooth muscle actin specific antibody (CL488-80008, Clone: 5H7) at dilution of 1:200.