

# Alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 (asm-1))

Product Details	
Size	500 µL
Species Reactivity	Bovine, Chicken, Human, Mouse, Non-human primate, Rabbit, Rat
Published Species	Dog, Rabbit, Rat, Pig, Sheep, Cat, Human, Mouse, Rhesus monkey
Host/Isotope	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	1A4 (asm-1)
Conjugate	Unconjugated
Immunogen	N-terminal decapeptide of alpha-smooth muscle isoform of actin; acetylated at the N-terminus
Form	Liquid
Concentration	40 µg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_10979529

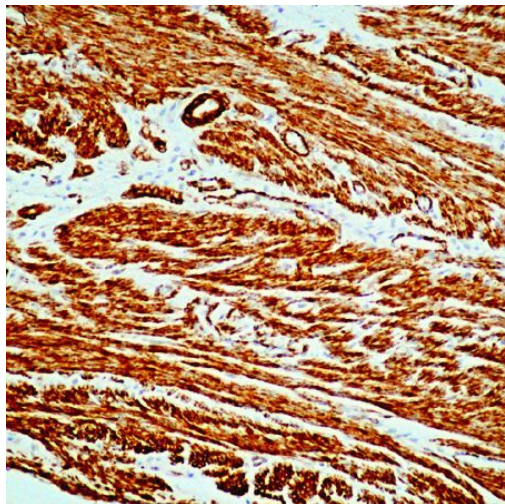
Applications	Tested	Dilution	Published
Immunocytochemistry (ICC)	✓	1:100-1:500	22 Publications
Immunohistochemistry (Paraffin) (IHC (P))	✓	1:800	3 Publications
Immunohistochemistry (IHC)	-	1:100	119 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1:100	1 Publication
Western Blot (WB)	✓	1:100-1:500	15 Publications
Flow Cytometry (Flow)	-		3 Publications
Immunofluorescence (IF)	✓	1:100-1:500	

## Product Specific Information

MA5-11547 targets Actin Smooth Muscle IF, WB, and IHC (P) applications and shows reactivity with Bovine, Chicken, Human, mouse, Non-human primate, Rabbit, and Rat samples. This antibody detects a non-specific band at approx. 30 kDa in Hela cell lysates.

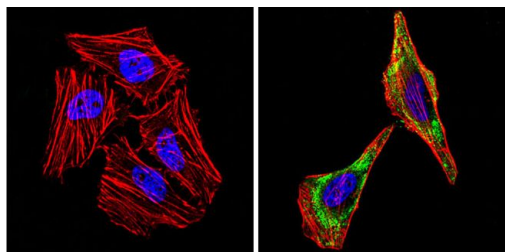
The MA5-11547 immunogen is n-terminal decapeptide of alpha-smooth muscle isoform of actin; acetylated at the N-terminus.

## Product Images For Alpha-Smooth Muscle Actin Monoclonal Antibody (1A4 (asm-1))



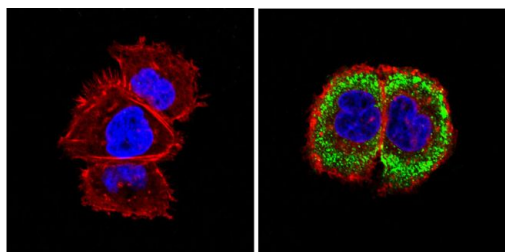
### Alpha-Smooth Muscle Actin Antibody (MA5-11547) in IHC

Formalin-fixed, paraffin-embedded human leiomyoma stained with Smooth Muscle Actin antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of smooth muscle cells.



### Alpha-Smooth Muscle Actin Antibody (MA5-11547) in IF

Immunofluorescent analysis of Actin Smooth Muscle (green) showing positive staining in the cytoplasm of HeLa cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with an Actin Smooth Muscle monoclonal antibody (Product # MA5-11547) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-mouse IgG (H+L) secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.



### Alpha-Smooth Muscle Actin Antibody (MA5-11547) in IF

Immunofluorescent analysis of Actin Smooth Muscle (green) showing positive staining in the cytoplasm of A431 cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with an Actin Smooth Muscle monoclonal antibody (Product # MA5-11547) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-mouse IgG (H+L) secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.

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## Immunocytochemistry (22)

Journal of visualized experiments : JoVE

### Scaling of Engineered Vascular Grafts Using 3D Printed Guides and the Ring Stacking Method.

"MA511547 was used in immunocytochemistry to describe a "Ring Stacking Method" to synthesize blood vessels"

Authors: Pinnock CB,Xu Z,Lam MT

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2017

Nature protocols

### Isolation, culture and evaluation of multilineage-differentiating stress-enduring (Muse) cells.

"MA5-11547 was used in immunocytochemistry to describe methods to isolate and evaluate multilineage-differentiating stress-enduring cells"

Authors: Kuroda Y,Wakao S,Kitada M,Murakami T,Nojima M,Dezawa M

**Species**  
Human

**Dilution**  
1:100

**Year**  
2014

[View more ICC references on thermofisher.com](#)

## Immunohistochemistry (Paraffin) (3)

Laboratory investigation; a journal of technical methods and pathology

### Ductular reactions in the liver regeneration process with local inflammation after physical partial hepatectomy.

"MA511547 was used in immunohistochemistry - paraffin section to examine the liver regeneration process after physical partial hepatectomy"

Authors: Suzuki Y,Katagiri H,Wang T,Kakisaka K,Kume K,Nishizuka SS,Takikawa Y

**Species**  
Mouse

**Dilution**  
1:600

**Year**  
2016

PloS one

### Histatin-1 Expression in Human Lacrimal Epithelium.

"MA5-11547 was used in immunohistochemistry - paraffin section to study human lacrimal epithelium and histatin-1 expression"

Authors: Shah D,Ali M,Pasha Z,Jaboori AJ,Jassim SH,Jain S,Aakalu VK

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

[View more IHC \(P\) references on thermofisher.com](#)

## More applications with references on thermofisher.com

IHC (119)

IHC (F) (1)

WB (15)

Flow (3)

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