

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

Product Details	
Size	500 µL
Species Reactivity	Bovine, Chicken, Human, Mouse, Non-human primate, Rabbit, Rat
Published Species	Dog, Rabbit, Rat, Pig, Sheep, Cat, Mouse, Human, Rhesus monkey
Host/Isotope	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	1A4 (asm-1)
Conjugate	Biotin
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_10981631

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	Assay Dependent	22 Publications
Immunofluorescence (IF)	Assay Dependent	-
Immunohistochemistry (Paraffin) (IHC (P))	1:800	1 Publication
Western Blot (WB)	1:100-1:500	16 Publications
Flow Cytometry (Flow)	-	3 Publications
Immunohistochemistry (IHC)	-	141 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

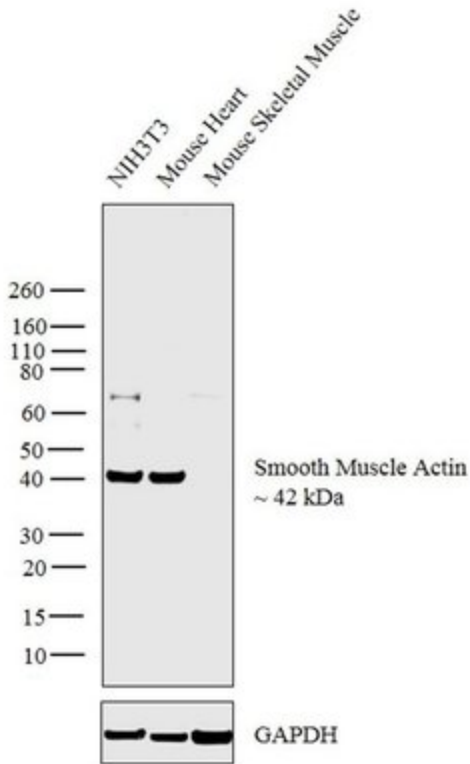
MA5-11544 targets Actin Smooth Muscle in WB, immunofluorescence and immunohistochemistry applications and shows reactivity with cow, chicken, human, mouse, non-human primate, rabbit, and rat samples.

The MA5-11544 immunogen is n-terminal decapeptide of alpha-smooth muscle isoform of actin; acetylated at the N-terminus.

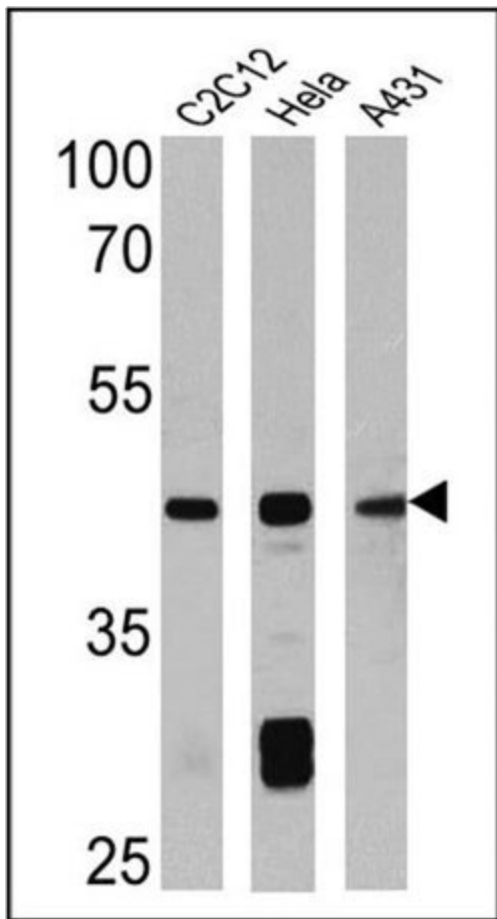
Advanced Verification Data

Alpha-Smooth Muscle Actin Antibody (MA5-11544)

Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue models owing to their inherent genetic constitution. Relative expression of Smooth Muscle Actin was observed in Mouse heart in comparison to Mouse Skeletal Muscle using product (Product # MA5-11544) in western blot. Relative expression validation info.



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

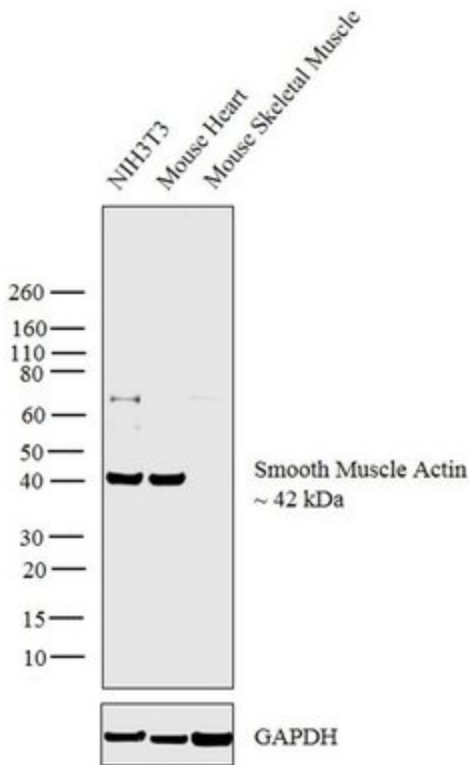


Alpha-Smooth Muscle Actin Antibody (MA5-11544) in WB

Western blot analysis of Actin Smooth Muscle was performed by loading 25 μ g of C2C12 (Lane 1), HeLa (Lane 2), and A431 (Lane 3) cell lysates and a molecular weight protein ladder onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked with a blocking buffer at 4°C overnight. The membrane was probed with an Actin Smooth Muscle monoclonal antibody (Product # MA5-11547) at a dilution of 1:100 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Results show a band at 42 kDa in all three cell lysates.

Alpha-Smooth Muscle Actin Antibody (MA5-11544) in WB

Western blot analysis was performed on whole cell extracts (30 μ g lysate) of NIH3T3 (Lane 1), tissue extracts of Mouse Heart (Lane 2) and Mouse Skeletal Muscle (Lane 3). The blot was probed with Anti-Smooth Muscle Actin Monoclonal Antibody (1A4 (asm-1)) (Product # MA5-11544, 1:500 dilution) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25 μ g/ml, 1:4000 dilution). A 42 kDa band corresponding to smooth muscle actin was observed in NIH3T3 and mouse heart extract tested.



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Immunohistochemistry (Paraffin) (1)

Laboratory investigation; a journal of technical methods and pathology

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

"MA511544 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

Western Blot (16)

PloS one

Attenuation of CCl4-induced hepatic fibrosis in mice by vaccinating against TGF-1.

"MA5-11544 was used in western blot to study the ability of vaccination against TGF-beta1 to protect against hepatic fibrosis in a liver injury model"

Authors: Fan X,Zhang Q,Li S,Lv Y,Su H,Jiang H,Hao Z

Species
Mouse

Dilution
Not Cited

Year
2014

Oncogene

Germline mutation of Brca1 alters the fate of mammary luminal cells and causes luminal-to-basal mammary tumor transformation.

"MA5-11544 was used in western blot to study the mechanism by which germline Brca1 mutation promotes luminal-to-basal mammary tumor transformation"

Authors: Bai F,Smith MD,Chan HL,Pei XH

Species
Mouse

Dilution
Not Cited

Year
2013

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Immunohistochemistry (141)

Matrix biology : journal of the International Society for Matrix Biology

Tight skin 2 mice exhibit a novel time line of events leading to increased extracellular matrix deposition and dermal fibrosis.

"MA5-11544 was used in immunohistochemistry to study the time-course of extracellular matrix deposition and dermal fibrogenesis in the murine Tsk2 model of systemic sclerosis"

Authors: Long KB,Artlett CM,Blankenhorn EP

Species
Mouse

Dilution
1:5000

Year
2014

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More applications with references on thermofisher.com

ICC (22) Misc (1) Flow (3)

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