

Actin Monoclonal Antibody (mAbGEa)

Product Details

Size	100 µL
Species Reactivity	Bovine, Fruit fly, Human, Mouse, Sheep, Plant, Rat, Xenopus, Yeast, Zebrafish
Published Species	Rat, Yeast, Pig, Fruit fly, Bacteria, Bovine, Plant, Human, Mouse, Goat, Xenopus
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	mAbGEa
Conjugate	Unconjugated
Immunogen	Purified Arabidopsis actin protein.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	ascites
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2223496

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000-1:10,000	111 Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100	-
Immunocytochemistry (ICC/IF)	1:10-1:100	4 Publications
ELISA (ELISA)	Assay-dependent	1 Publication
Immunoprecipitation (IP)	-	1 Publication
ChIP assay (ChIP)	-	1 Publication
Miscellaneous PubMed (Misc)	-	3 Publications

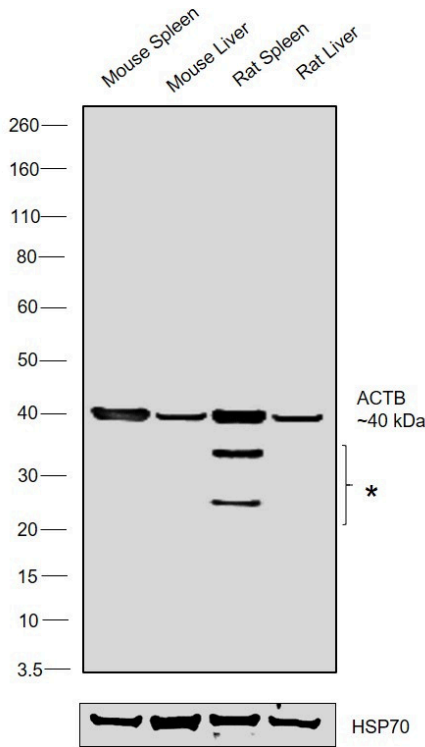
Product Specific Information

MA1-744 detects actin protein in human, mouse, rat, bovine, sheep, drosophila, zebra fish (Danio rerio), yeast, arabidopsis and xenopus samples. This antibody has shown cross-reactivity with actin 1, 2, 3, 4, 7, 8, 11 and 12.

MA1-744 has successfully been used in Western blot and ELISA procedures. By Western blot, this antibody detects a 45 kDa protein representing actin.

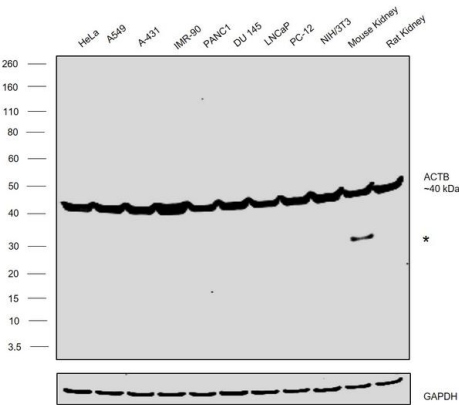
The MA1-744 immunogen is purified actin protein from Arabidopsis.

Product Images For Actin Monoclonal Antibody (mAbGEa)



Actin Antibody (MA1-744)

Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues tested owing to their inherent genetic constitution. Relative expression of Actin, cytoplasmic 1 was observed in Mouse Spleen and Rat Spleen in comparison to Mouse Liver and Rat Liver using Anti-Actin Monoclonal Antibody (mAbGEa) (Product # MA1-744) in Western Blot. doi: 10.1038/bcj.2014.18 {RE}

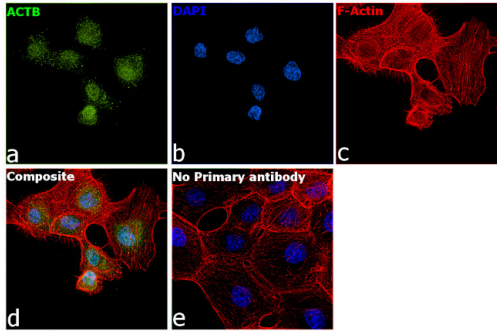


Actin Antibody (MA1-744) in WB

Western Blot was performed using Anti-Actin Monoclonal Antibody (mAbGEa) (Product # MA1-744) and a ~40 kDa band corresponding to Actin, cytoplasmic 1 was observed along with an uncharacterised band (*) at ~30 kDa across cell lines and tissues tested. Whole cell extracts (30 µg lysate) of HeLa (Lane 1), A549 (Lane 2), A-431 (Lane 3), IMR-90 (Lane 4), PANC1 (Lane 5), DU 145 (Lane 6), LNCaP (Lane 7), PC-12 (Lane 8), NIH/3T3 (Lane 9), Mouse Kidney (Lane 10), Rat Kidney (Lane 11) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2001) by iBlot® 2 Dry Blotting System (Product # IB21001). The Blot was probed with the primary antibody (1:10000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).

Actin Antibody (MA1-744) in ICC/IF

Immunofluorescence analysis of Actin, cytoplasmic 1 was performed using 70% confluent log phase DU 145 cells. The cells were fixed with 4% paraformaldehyde for 5 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with Actin Monoclonal Antibody (mAbGEa) (Product # MA1-744) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 647 (Product # A32787), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing Nucleus and cytoplasm localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60x magnification.



124 References

Western Blot (111)

<div>International journal of molecular sciences</div> <div>Tryptophan Hydroxylase-2-Mediated Serotonin Biosynthesis Suppresses Cell Reprogramming into Pluripotent State.</div> <div>"MA1-744 was used in Western Blotting to suggest a negative role of serotonin biosynthesis in the reprogramming of somatic cells to a pluripotent state."</div> <div>Authors: Sinenko SA,Kuzmin AA,Skvortsova EV,Ponomartsev SV,Efimova EV,Bader M,Alenina N,Tomilin AN</div>	<div>Year</div> <div>2023</div> <div>Species</div> <div>Mouse</div>
<div>Cell division</div> <div>Circular RNA hsa_circ_0075323 promotes glioblastoma cells proliferation and invasion via regulation of autophagy.</div> <div>"MA1-744 was used in Western Blotting to explore the biological function of hsa_circ_0075323 in GBM and its relationship with autophagy regulation."</div> <div>Authors: Zhang W,Shi Z,Chen S,Shen S,Tu S,Yang J,Qiu Y,Lin Y,Dai X</div>	<div>Year</div> <div>2023</div> <div>Species</div> <div>Human</div>

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Immunohistochemistry (3)

<div>World journal of stem cells</div> <div>Efficient differentiation of vascular smooth muscle cells from Wharton's Jelly mesenchymal stromal cells using human platelet lysate: A potential cell source for small blood vessel engineering.</div> <div>"Published figure using Actin monoclonal antibody (Product # MA1-744) in Immunocytochemistry"</div> <div>Authors: Mallis P,Papapanagiotou A,Katsimpoulas M,Kostakis A,Siasos G,Kassi E,Stavropoulos-Giokas C,Michalopoulos E</div>	<div>Year</div> <div>2020</div> <div>Species</div> <div></div> <div>Dilution</div> <div></div>
<div>Molecules (Basel, Switzerland)</div> <div>Polyphenols from <i>Tamarix nilotica</i>: LCESI-MSⁿ Profiling and In Vivo Antifibrotic Activity.</div> <div>"Published figure using Actin monoclonal antibody (Product # MA1-744) in Immunohistochemistry"</div> <div>Authors: Sekkien A,Swilam N,Ebada SS,Esmat A,El-Khatib AH,Linscheid MW,Singab AN</div>	<div>Year</div> <div>2018</div> <div>Species</div> <div>Rat</div> <div>Dilution</div> <div>1:50</div>

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More applications with references on thermofisher.cn

- ICC/IF (4)
- ELISA (1)
- IP (1)
- ChIP (1)
- Misc (3)

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