

Actin Monoclonal Antibody (ACTN05 (C4))

Product Details

Size	500 µL
Species Reactivity	Bovine, Dog, Chicken, Human, Mouse, Pig, Protozoa, Rabbit, Rat
Published Species	Rat, Yeast, Pig, Insect, Non-human primate, Chordate, Hamster, Zebrafish, Fish, Human, Mouse, Rhesus monkey, Xenopus, Dog, Ferret, Rabbit, C. elegans, Fruit fly
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	ACTN05 (C4)
Conjugate	Unconjugated
Immunogen	Chicken gizzard actin
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	15mM sodium azide
Storage conditions	4° C
RRID	AB_11004139

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5 µg/mL	324 Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200-1:400	-
Immunocytochemistry (ICC/IF)	1:10-1:200	3 Publications
Immunoprecipitation (IP)	2 µg	5 Publications
Immunomicroscopy (IM)	-	1 Publication
Miscellaneous PubMed (Misc)	-	4 Publications

Product Specific Information

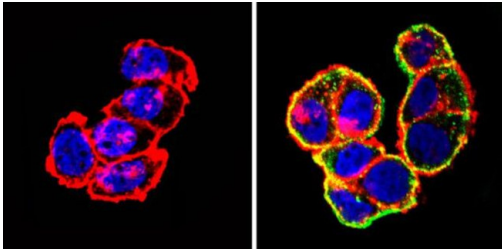
MA5-11869 reacts with all six known vertebrate isoforms of actin (MW ~42kDa), and with two cytoplasmic actins (beta and gamma), which are highly homologous to each other but differ from the muscle actins by ~25 amino acid residues. This product is highly recommended for monitoring total protein load on Western blots.

Staining of formalin-fixed, paraffin-embedded tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10-20 minutes, followed by cooling at room temperature for 20 minutes. Suggested positive controls are HeLa cells and skeletal muscle.

MA5-11869 is a suggested replacement to Product # 82353, clone # C4.

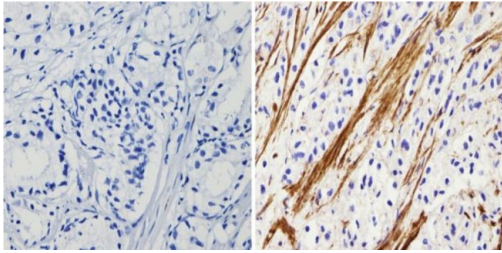
Product Images For Actin Monoclonal Antibody (ACTN05 (C4))

Actin Antibody (MA5-11869) in ICC/IF



Immunofluorescent analysis of Actin pan (green) showing staining in the cytoplasm of T-47D cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with an Actin pan monoclonal antibody (Product # MA5-11869) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated 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 Hoechst or DAPI. Images were taken at a magnification of 60x.

Actin Antibody (MA5-11869) in IHC (P)



Immunohistochemistry analysis of Actin pan showing positive staining in the cytoplasm of paraffin-treated Human prostate carcinoma (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a Actin pan monoclonal antibody (Product # MA5-11869) diluted by 3% BSA-PBS at a dilution of 1:200 overnight at 4°C in a humidified chamber. Tissues were washed extensively PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

Actin Antibody (MA5-11869) in IP

Immunoprecipitation of Actin pan using Actin pan Monoclonal Antibody (Product # MA5-11869) on denatured Human HeLa Cells.



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Western Blot (324)

<p>Journal of medical virology</p> <p>Human cytomegalovirus infection perturbs neural progenitor cell fate via the expression of viral microRNAs.</p> <p>"Published figure using Actin monoclonal antibody (Product # MA5-11869) in Western Blot"</p> <p>Authors: Jiang X,Liu S,Fu YR,Liu XJ,Li XJ,Yang B,Jiang HF,Shen ZZ,Alemu EA,Vazquez P,Tang Y,Kaarbø M,McVoy MA,Rayner S,Luo MH</p>	<p>Year 2023</p> <p>Species Human</p>
<p>Nature communications</p> <p>Jag1-Notch cis-interaction determines cell fate segregation in pancreatic development.</p> <p>"MA5-11869 was used in Western Blotting to present a mathematical model to simulate the differentiation of MPCs into PACs and BPs by coupling the gene regulatory network to the spatial distribution of interacting cells."</p> <p>Authors: Xu X,Seymour PA,Sneppen K,Trusina A,Egeskov-Madsen AR,Jørgensen MC,Jensen MH,Serup P</p>	<p>Year 2023</p> <p>Species Mouse</p>

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Immunohistochemistry (3)

<p>Developmental biology</p> <p>Oocyte selection is concurrent with meiosis resumption in the coenocystic oogenesis of Oikopleura.</p> <p>"MA5-11869 was used in immunohistochemistry and western blot to study the growth and maturation of oocytes in the tunicate Oikopleura"</p> <p>Authors: Ganot P,Moosmann-Schulmeister A,Thompson EM</p>	<p>Year 2008</p> <p>Species Chordate</p> <p>Dilution 1:5000</p>
<p>International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists</p> <p>Atypical endometrial stromal cells related with a polypoid leiomyoma with bizarre nuclei: a case report.</p> <p>"MA5-11869 was used in immunohistochemistry to report on a case of atypical endometrial stromal cells related to a polypoid leiomyoma with bizarre nuclei"</p> <p>Authors: Usubütün A,Karaman N,Ayhan A,Küçükali T</p>	<p>Year 2005</p> <p>Species Human</p> <p>Dilution 1:1000</p>

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More applications with references on thermofisher.com

- ICC/IF (3)
- IP (5)
- IM (1)
- Misc (4)

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