

# Actin Monoclonal Antibody (ACTN05 (C4))

Product Details	
Size	500 µL
Species Reactivity	Bovine, Dog, Chicken, Human, Mouse, Pig, Protozoa, Rabbit, Rat
Published Species	Yeast, Rat, Pig, Non-human primate, Hamster, Zebrafish, Fish, Human, Mouse, Xenopus, Dog, Ferret, Rabbit, Fruit fly
Host/Isotope	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	Published
Western Blot (WB)	✓	0.5 µg/mL	279 Publications
Miscellaneous PubMed (MISC)	-	1:10,000	4 Publications
Immunohistochemistry (IHC)	-		3 Publications
Immunoprecipitation (IP)	✓	2 µg	5 Publications
Immunocytochemistry (ICC)	✓	1:10-1:200	2 Publications
Immunofluorescence (IF)	✓	1:10-1:200	
Immunohistochemistry (Paraffin) (IHC (P))	✓	1:200-1:400	

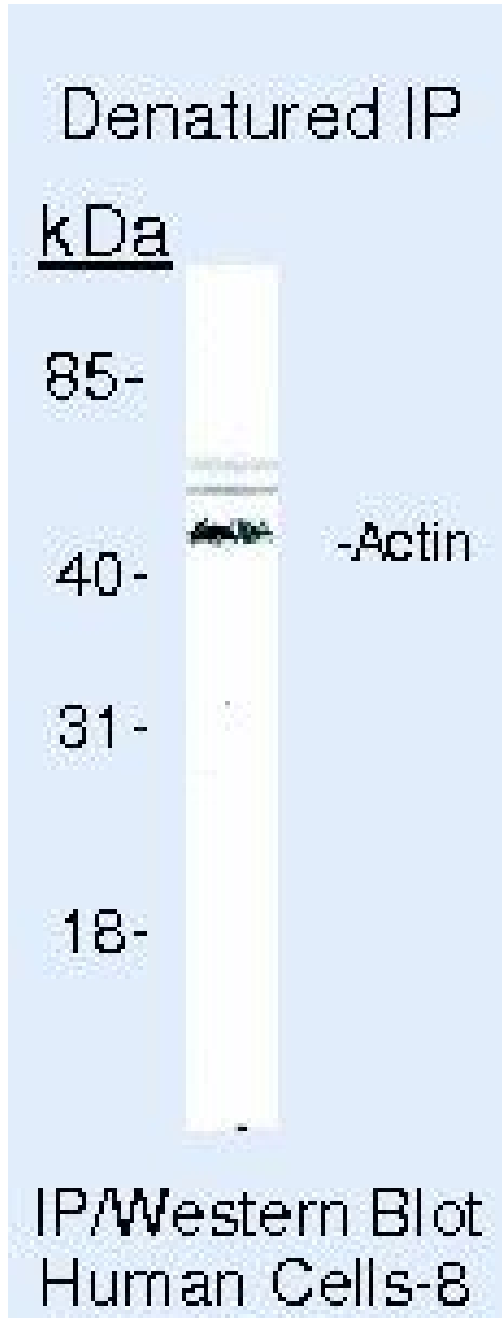
## Product Specific Information

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.

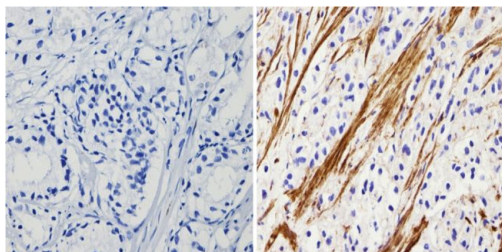
MA5-11869 is a suggested replacement to Product # 82353, clone # C4.

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



### Actin Antibody (MA5-11869) in IP

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

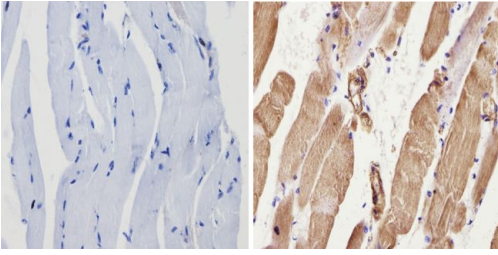


### Actin Antibody (MA5-11869) in IHC (P)

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% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O 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 IHC (P)

Immunohistochemistry analysis of Actin pan showing positive staining in the cytoplasm of paraffin-treated Mouse skeletal muscle (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% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O 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.



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## Western Blot (279)

Toxicological sciences : an official journal of the Society of Toxicology

### In Vitro Transformation of Human Bronchial Epithelial Cells by Diesel Exhaust Particles: Gene Expression Profiling and Early Toxic Responses.

"Published figure using Actin monoclonal antibody (Product # MA5-11869) in Western Blot"

Authors: Rynning I, Neca J, Vrbova K, Libalova H, Rossner P, Holme JA, Gützkow KB, Afanou AKJ, Arnoldussen YJ, Hrubá E, Skare Ø, Haugen A, Topinka J, Machala M, Møllerup S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

Scientific reports

### Rev1 contributes to proper mitochondrial function via the PARP-NAD<sup>+</sup>-SIRT1-PGC1 axis.

"Published figure using Actin monoclonal antibody (Product # MA5-11869) in Western Blot"

Authors: Fakouri NB, Durhuus JA, Regnell CE, Angleys M, Desler C, Hasan-Olive MM, Martín-Pardillos A, Tsaalbi-Shtylik A, Thomsen K, Lauritzen M, Bohr VA, de Wind N, Bergersen LH, Rasmussen LJ

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

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

## Miscellaneous PubMed (4)

Molecular medicine reports

### Effective elimination of chronic lymphocytic leukemia cells in the stromal microenvironment by a novel drug combination strategy using redox-mediated mechanisms.

"MA5-11869 was used in western blot to investigate how redox reactions affect treatment of chronic lymphocytic leukemia"

Authors: Zhang W, Pelicano H, Yin R, Zeng J, Wen T, Ding L, Huang R

**Species**  
Human

**Dilution**  
1:10,000

**Year**  
2015

PLoS biology

### CDK8-Cyclin C Mediates Nutritional Regulation of Developmental Transitions through the Ecdysone Receptor in Drosophila.

"MA5-11869 was used in western blot to suggest that CDK8-CycC links nutrient intake to EcR activity and Drosophila development"

Authors: Xie XJ, Hsu FN, Gao X, Xu W, Ni JQ, Xing Y, Huang L, Hsiao HC, Zheng H, Wang C, Zheng Y, Xiaoli AM, Yang F, Bondos SE, Ji JY

**Species**  
Fruit fly

**Dilution**  
Not Cited

**Year**  
2015

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

## More applications with references on thermofisher.com

IHC (3) IP (5) ICC (2)

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