OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA336491

Actin (ACTA1) Mouse Monoclonal Antibody [Clone ID: mAbGEa]

Product data:

Product Type:	Primary Antibodies
Clone Name:	mAbGEa
Applications:	ELISA, FC, ICC/IF, IHC, Simple Western, WB
Recommended Dilution:	Western Blot: 1:100-1:1000, ELISA: 1:100 - 1:2000, Immunohistochemistry: 1:200, Immunohistochemistry-Paraffin: 1:200, Simple Western: 1:25, Immunocytochemistry/ Immunofluorescence: 1:20-1:100, Flow Cytometry: 1 ug/ml, Flow (Intracellular): 1 ug/ml
Reactivity:	Human, Mouse, Rat, Bovine, Hamster, Drosophila
Host:	Mouse
Isotype:	IgM, kappa
Clonality:	Monoclonal
Immunogen:	Purified recombinant Arabidopsis Actin protein [UniProt# P0CJ46]
Formulation:	Tris-glycine, 150mM NaCl pH 7.5, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	IgM purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	actin, alpha 1, skeletal muscle
Database Link:	NP_001091 Entrez Gene 11459 MouseEntrez Gene 29437 RatEntrez Gene 58 Human P68133
Background:	Actins are highly conserved proteins that are involved in various types of cell motility, and maintenance of the cytoskeleton. In vertebrates, three main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins co-exist in most cell types as components of the cytoskeleton, and as mediators of internal cell motility.
Synonyms:	ACTA; ASMA; CFTD; CFTD1; CFTDM; MPFD; NEM1; NEM2; NEM3; SHPM

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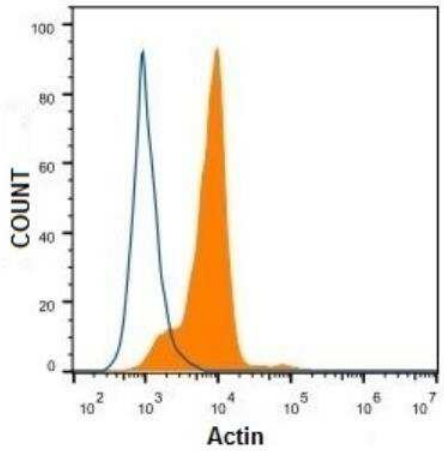
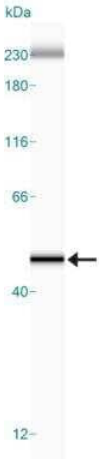
Note: This Actin Antibody (mAbGEa) is useful for Western blot, Immunohistochemistry on paraffin-embedded sections, Immunocytochemistry/Immunofluorescence and ELISA. In WB, a band is seen at ~45 kDa representing Actin. In IHC-P and ICC/IF, cytoplasmic staining is observed. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

Protein Families: Stem cell - Pluripotency

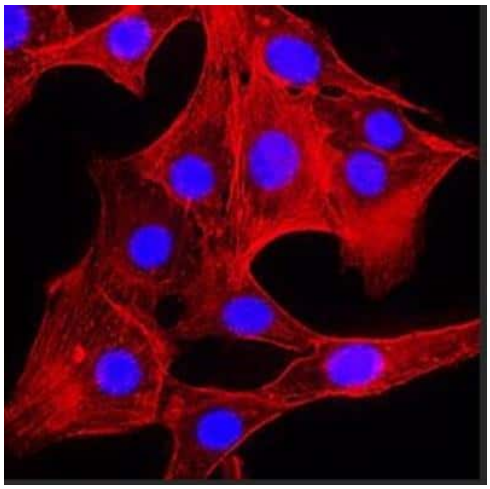
Product images:



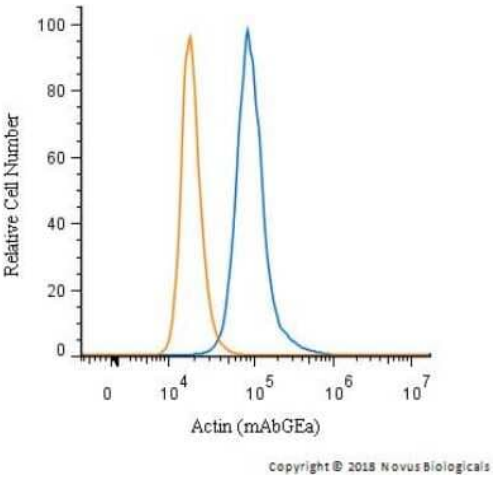
Flow Cytometry: Actin Antibody (mAbGEa) TA336491 - Analysis of HeLa cells using mouse Actin antibody (Orange) and Isotype control Antibody (Blue).



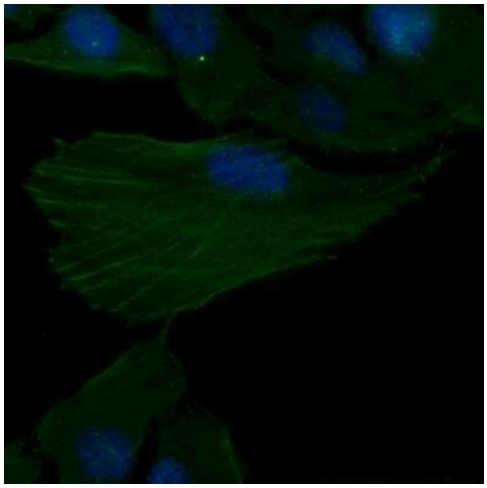
Simple Western: Actin Antibody (mAbGEa) TA336491 - Image shows a specific band for Actin in 0.1 mg/mL of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



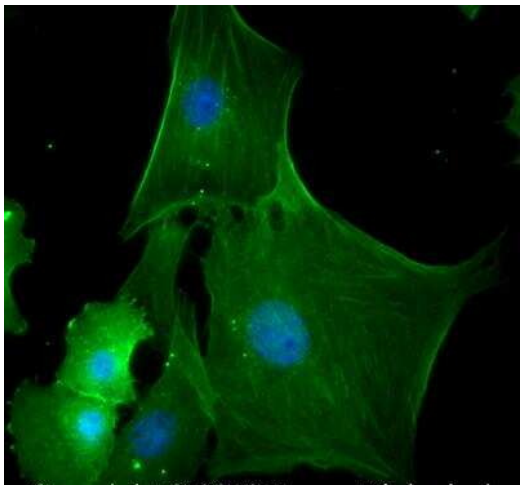
Immunocytochemistry/Immunofluorescence: Actin Antibody (mAbGEa) TA336491 - Actin was detected in NIH-3T3 cells fixed with methanol using mouse anti-mouse beta-Actin monoclonal antibody (TA336491) at 1:1800. Cells were stained using Northern Lights 557 conjugated anti-mouse secondary antibody (NL007) and counterstained with DAPI.



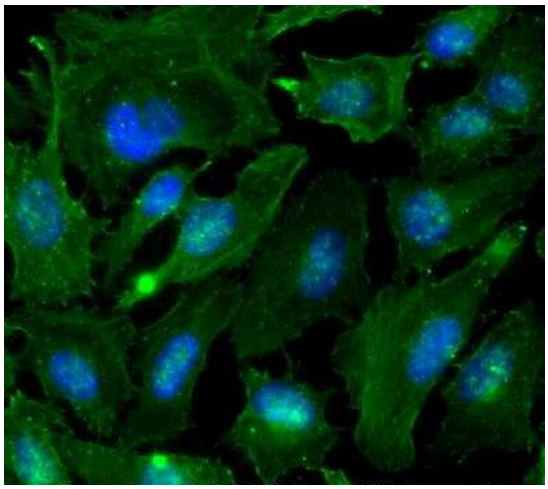
Flow (Intracellular): Actin Antibody (mAbGEa) TA336491 - An intracellular stain was performed on A549 cells with TA336491 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by mouse IgM Alexa Fluor 488-conjugated secondary antibody.



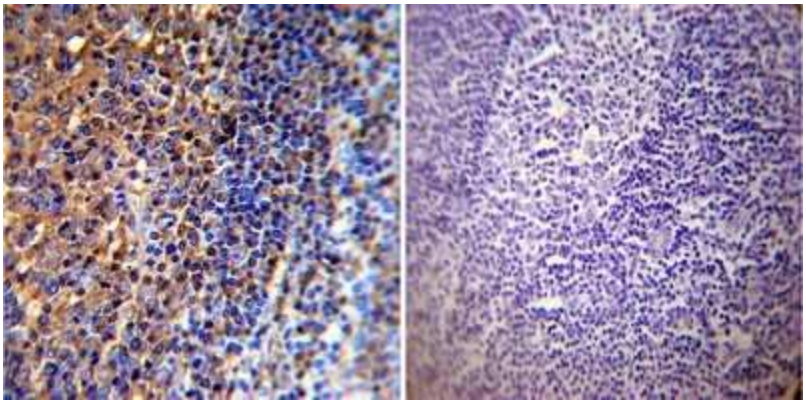
Immunocytochemistry/Immunofluorescence: Actin Antibody (mAbGEa) TA336491 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-Actin (mAbGEa) at 2 ug/mL overnight at 4C and detected with an anti-mouse IgM DyLight 488 (Green) at 1:500. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



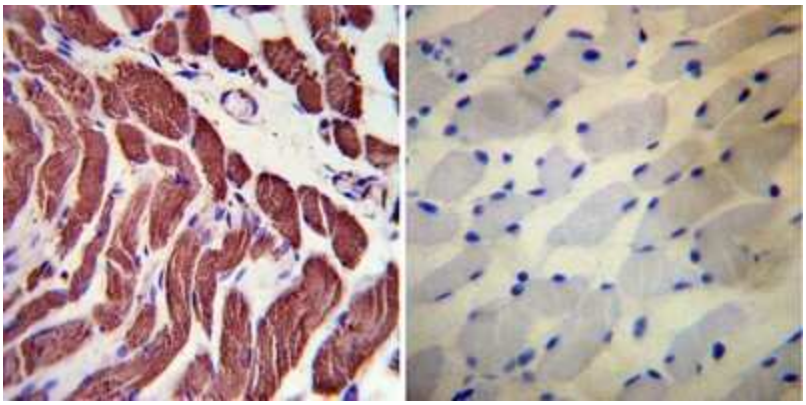
Immunocytochemistry/Immunofluorescence: Actin Antibody (mAbGEa) TA336491 - NIH-3T3 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-Actin (mAbGEa) at 5 ug/mL overnight at 4C and detected with an anti-Mouse IgM DyLight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



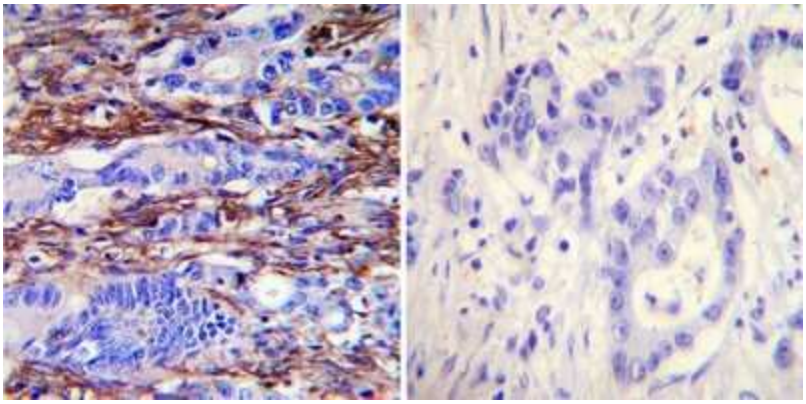
Immunocytochemistry/Immunofluorescence: Actin Antibody (mAbGEa) TA336491 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton-X100. The cells were incubated with anti-Actin Antibody (mAbGEa) at 2 ug/ml overnight at 4C and detected with an anti-mouse Dylight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



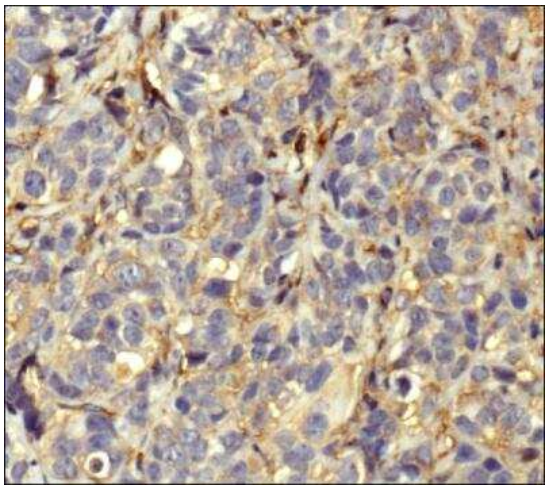
Immunohistochemistry-Paraffin: Actin Antibody (mAbGEa) TA336491 - Both normal and cancer biopsies of deparaffinized Human tonsil tissues.



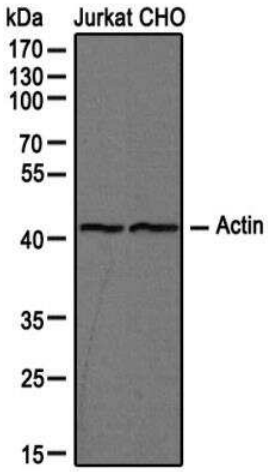
Immunohistochemistry-Paraffin: Actin Antibody (mAbGEa) TA336491 - Both normal and cancer biopsies of deparaffinized Human skeletal muscle tissues.



Immunohistochemistry-Paraffin: Actin Antibody (mAbGEa) TA336491 - Both normal and cancer biopsies of deparaffinized Human colon carcinoma tissues.

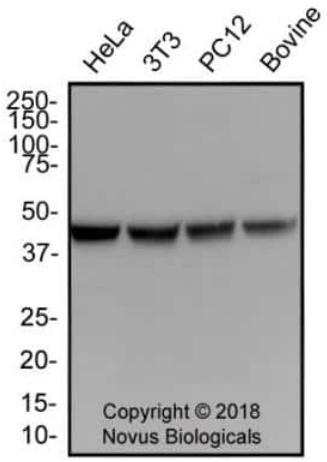


Immunohistochemistry-Paraffin: Actin Antibody (mAbGEa) TA336491 - Analysis of Actin on human breast cancer tissue using DAB with hematoxylin counterstain.



Western Blot: Actin Antibody (mAbGEa) TA336491 - Analysis of Jurkat and CHO cell lysates using actin antibody TA336491 at 1:100.

Western Blot: Actin Antibody (mAbGEa) TA336491 - Analysis of Actin expression in 2) HeLa, 3) NTERA-2, 4) A431, 5) HepG2, 6) MCF7, 7) NIH-3T3, 8) PC-12 and 9) COS-7 whole cell lysates.



Western Blot: Actin Antibody (mAbGEa) TA336491 - Total protein from HeLa, 3T3, PC12 and Bovine normal tissue was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 1.0 ug/mL anti-Actin in 5% blocking buffer and detected with an anti-mouse IgM secondary antibody using chemiluminescence.