



# beta Actin Loading Control Monoclonal Antibody (BA3R)

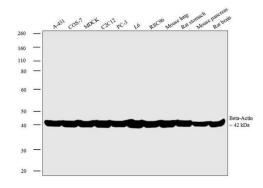
<b>Product Details</b>			
Size	100 μg		
Species Reactivity	Chicken, Human, Mouse, Rabbit, Rat		
Published Species	Rabbit, Fungi, Rat, Pig, Non-human primate, Hamster, Plant, Human, Mouse, Chicken, Guinea pig		
Host/Isotype	Mouse / IgG2b		
Class	Monoclonal		
Туре	Antibody		
Clone	BA3R		
Conjugate	Unconjugated		
Immunogen	Beta-actin N-terminal peptide.		
Form	Liquid		
Concentration	1 mg/mL		
Purification	Protein A		
Storage buffer	PBS, pH 7.2		
Contains	no preservative		
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.		
RRID	AB_10979409		

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000-1:10,000	263 Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000	-
Immunocytochemistry (ICC/IF)	Assay-dependent	14 Publications
Flow Cytometry (Flow)	1-5 μg/1x10^6 cells	1 Publication
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	-	1 Publication
Miscellaneous PubMed (Misc)	-	6 Publications

### **Product Specific Information**

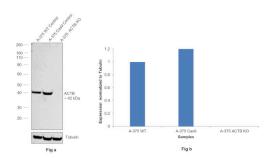
Storage and handling: add 0.05% sodium azide if desired. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

# Product Images For beta Actin Loading Control Monoclonal Antibody (BA3R)



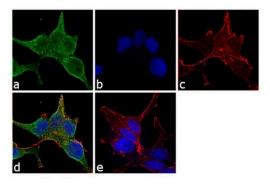
#### beta Actin Loading Control Antibody (MA5-15739) in WB

Western blot analysis was performed on whole cell extracts (30µg lysate) of A-431 (Lane 1), COS-7 (Lane 2), MDCK (Lane 3), C2C12 (Lane 4), PC-3 (Lane 5), L6 (Lane 6), RSC96 (Lane 7), tissue extracts (30µg lysate) of Mouse Lung (Lane 8), Rat Stomach (Lane 9), Mouse Pancreas (Lane 10) and Rat Brain (Lane 11). The blots were probed with Anti-beta Actin Mouse Monoclonal Antibody (Product # MA5-15739-1MG, 1:1000 dilution) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25µg/mL, 1:4000 dilution). A 42 kDa band corresponding to beta Actin was observed across the cell lines and tissues tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # El0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



#### beta Actin Loading Control Antibody (MA5-15739)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein inACTB KO cell line compared to control cell line using beta Actin Loading Control Monoclonal Antibody (BA3R) (Product # MA5-15739). {KO}



# beta Actin Loading Control Antibody (MA5-15739) in ICC/IF

Immunofluorescence analysis of beta Actin was performed using 70% confluent log phase LNCaP cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with beta Actin (BA3R) Loading Control Mouse Monoclonal Antibody (Product # MA5-15739-1MG) at 2µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.

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#### **□ 288 References**

#### Western Blot (263)

Histology and histopathology

Hsa\_circ\_0070440 promotes lung adenocarcinoma progression by SLC7A11-mediated-ferroptosis.

"MA5-15739 was used in Western Blotting to show that circ\_0070440 contributed to malignant progression and suppressed ferroptosis of lung adenocarcinoma (LUAD) by sponging miR-485-5p and upregulating SLC7A11 expression."

Authors: Zhao Y, Cui Q, Shen J, Shen W, Weng Y

**Year** 2023

Species Human

Dilution 1:4000

PloS one

HIV-1 release requires Nef-induced caspase activation.

"MA5-15739 was used in Western Blotting to show that HIV viral release is not spontaneous, rather requires caspases activation and shedding of its adhesion receptor, CD62L."

Authors: Segura J,Ireland J,Zou Z,Roth G,Buchwald J,Shen TJ,Fischer E,Moir S,Chun TW,Sun PD

**Year** 2023

Species Human

View more WB references on thermofisher.cn

# Immunohistochemistry (3)

Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research

Distinct Roles of Glutamine Metabolism in Benign and Malignant Cartilage Tumors With IDH Mutations.

"MA5-15739 was used in Immunohistochemistry-immunofluorescence to demonstrate that glutaminase-mediated glutamine metabolism played distinct roles in enchondromas and chondrosarcomas with IDH1 or IDH2 mutations."

Authors: Zhang H,Puviindran V,Nadesan P,Ding X,Shen L,Tang YJ,Tsushima H,Yahara Y,Ban GI,Zhang GF,Karner CM,Alman BA

**Year** 2022

Species Mouse

Archives of autoimmune diseases

Adiponectin receptor fragmentation in mouse models of type 1 and type 2 diabetes.

"MA5-15739 was used in Immunohistochemistry to investigate physiological variations in the concentrations of CTF in non-obese diabetic (NOD/ShiLtJ) mice and C57BL/6 mice with diet-induced obesity (DIO) as models of diabetes types 1 and 2, respectively."

Authors: Frabutt D,Stull N,Pineros AR,Tersey SA,Scheuner D,Mastracci TL,Pugia MJ

**Year** 2021

Species Mouse

View more IHC references on thermofisher.cn

# More applications with references on thermofisher.cn

ICC/IF (14) Flow (1) IP (1) Misc (6)

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