## PACKAGE INSERT

## Anti-Beta Actin Mouse Monoclonal Loading control Antibody [A2-F6]



Code: RA1002

Product Details	
Size	50ul
Species Reactivity	Human, Mouse, Rat
Host/Isotype	Mouse /IgG1
Class	Mmonoclonal
Туре	Primary antibodies
Conjugate	Unconjugated
Immunogen	Synthetic peptide (KLH-coupled) within human Beta-actin N terminal.
Form	Liquid
Purification	Protein A affinity purified
Storage buffer	1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
Database links:	SwissProt: P60709 Human   P60710 Mouse   P60711 Rat
Positive control:	NIH/3T3 cell lysate, PC-12 cell lysate, MCF-7 cell lysate, HepG2 cell lysate, Hela cell lysate, mouse lung tissue lysate, Hela, A549, NIH/3T3, human colon carcinoma tissue, mouse prostate tissue, mouse kidney tissue.

Applications	Tested Dilution	Publications
Western Blot (WB)	1:10000 - 1:150000	-
Immunohistochemistry (IHC)	1:100-1:200	-
Immunocytochemistry (ICC/IF)	1:100-1:200	-

## Images

kDa	000() 1/12,000 000() 1/120,000() 1/120,000() 1	Fig1: Western blot analysis of Beta Actin on Hela cell lysates with Mouse anti-Beta Actin antibody (RA1002). Hela cell lysates at 10 μg/Lane.
55-	120s	Predicted band size: 42 kDa
40-		Observed band size: 42 kDa
40-	• • • • 60s	12% SDS-PAGE gel.
55-	10-	Proteins were transferred to a PVDF membrane and blocked with 5%
40-	<b>-</b> - 40s	NFDM/TBST for 1 hour at room temperature. The primary antibody
55-	20s	(RA1002) at serial dilution was used in 5%NFDM/TBST at room
40- 55- 40-	10s	temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (S1001) at 1:100,000 dilution was used for 1 hour at room temperature.



Fig2: Western blot analysis of Beta Actin on different lysates with Mouse anti-Beta Actin antibody (RA1002) at 1/40,000 dilution.

Cell lysates at 10  $\mu$ g/Lane, tissue lysates at 20  $\mu$ g/Lane.

Predicted band size: 42kDa Obsened band size: 42kDa Exposure time: 1 minute; 12% SDS-PAGE gel.



**Fig3:** Western blot analysis of Beta actin on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (RA1002, 1/10,000) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (S1001) at 1:20,000 dilution was used for 1 hour at room temperature.

## Positive control:

Lane 1: NIH/3T3 cell lysate, 10 µg/Lane Lane 2: PC-12 cell lysate, 10 µg/Lane Lane 3: MCF-7 cell lysate, 10 µg/Lane Lane 4: HepG2 cell lysate, 10 µg/Lane Lane 5: Hela cell lysate, 10 µg/Lane Lane 6: Mouse lung tissue lysate, 20 µg/Lane



**Fig4:** ICC staining of Beta Actin in Hela cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (RA1002, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Mouse IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



**Fig5:** ICC staining of Beta Actin in A549 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10% negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (RA1002, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Mouse IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



**Fig6:** ICC staining of Beta Actin in NIH/3T3 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 10%negative goat serum for 15 minutes at room temperature. Cells were probed with the primary antibody (RA1002, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 conjugate-Goat anti-Mouse IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

**Fig7:** Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using anti-Beta Actin antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (RA1002, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Fig8:** Immunohistochemical analysis of paraffin-embedded mouse prostate tissue using anti-Beta Actin antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (RA1002, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Fig9:** Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-Beta Actin antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 30 minutes at room temperature, washed with ddH2O and PBS, and then probed with the primary antibody (RA1002, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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