

## β-actin (PTR2364) Mouse mAb

CatalogNo: YM3028

Orthogonal Validated 

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human,Mouse,Rat

#### Applications

- WB,IF,IP,ELISA

#### MW

- 42kD (Calculated)
- 42kD (Observed)

#### Isotype

- IgG1,Kappa

### Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

### Recommended Dilution Ratios

**WB 1:1000-5000**

**IF 1:100-500**

**ELISA 1:5000-50000**

**IP 1:50-1:200**

### Basic Information

**Clonality** Monoclonal

**Clone Number** PTR2364

### Immunogen Information

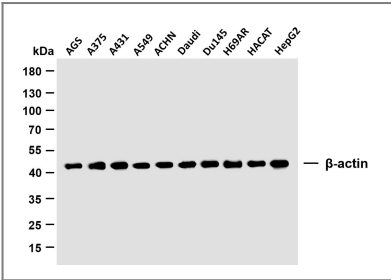
**Immunogen** Synthesized peptide derived from human protein.AA range: 1-100

**Specificity** This antibody detects endogenous levels of β-actin protein.

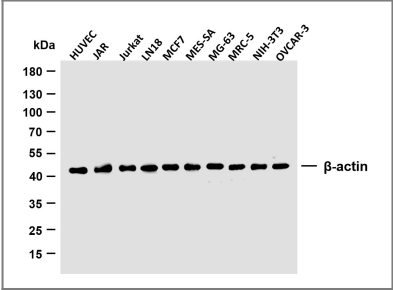
## Target Information

Gene name	ACTB		
Protein Name	Actin cytoplasmic 1		
	Organism	Gene ID	UniProt ID
	Human	<a href="#">60</a> ;	<a href="#">P60709</a> ;
	Mouse	<a href="#">11461</a> ;	<a href="#">P60710</a> ;
	Rat	<a href="#">81822</a> ;	<a href="#">P60711</a> ;
Cellular Localization	Cytoplasmic		
Tissue specificity	B-cell lymphoma,Brain,Cajal-Retzius cell,Eye,Fetal brain cortex,Foreskin,Hepatocellular car		
Function	<p>Disease:Defects in ACTB are a cause of dystonia juvenile-onset (DYTJ) [MIM:607371]. DYTJ is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTJ patients manifest progressive, generalized, dopa-unresponsive dystonia, developmental malformations and sensory hearing loss.,Function:Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.,miscellaneous:In vertebrates 3 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 coexist in most cell types as components of the cytoskeleton and as mediators of internal cell motility.,similarity:Belongs to the actin family.,subunit:Polymerization of globular actin (G-actin) leads to a structural filament (F-actin) in the form of a two-stranded helix. Each actin can bind to 4 others. Component of the BAF complex, which includes at least actin (ACTB), ARID1A, ARID1B/BAF250, SMARCA2, SMARCA4/BRG1, ACTL6A/BAF53, ACTL6B/BAF53B, SMARCE1/BAF57 SMARCC1/BAF155, SMARCC2/BAF170, SMARCB1/SNF5/INI1, and one or more of SMARCD1/BAF60A, SMARCD2/BAF60B, or SMARCD3/BAF60C. In muscle cells, the BAF complex also contains DPF3. Found in a complex with XPO6, Ran, ACTB and PFN1. Interacts with XPO6.,</p>		

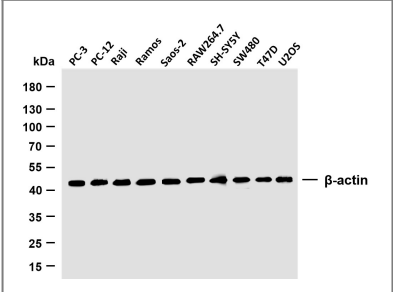
## Validation Data



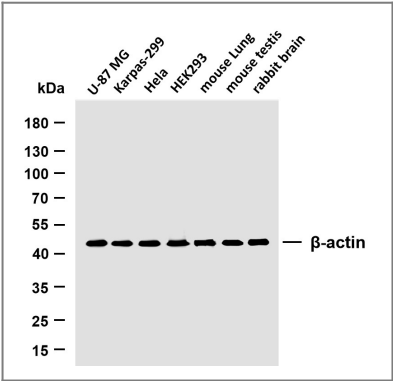
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti- $\beta$ -actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: AGS Lane 2: A375 Lane 3: A431 Lane 4: A549 Lane 5: ACHN Lane 6: Daudi Lane 7: Du145 Lane 8: H69AR Lane 9: HACAT Lane 10: HepG2



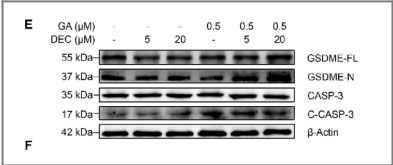
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: HUVEC Lane 2:JAR Lane 3:Jurkat Lane 4:LN18 Lane 5:MCF7 Lane 6:MES-SA Lane 7:MG-63 Lane 8:MRC-5 Lane 9:NIH-3T3 Lane 10:OVCAR-3



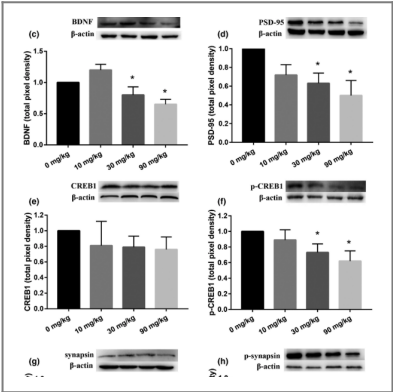
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: PC-3 Lane 2: PC-12 Lane 3: Raji Lane 4: Ramos Lane 5: Saos-2 Lane 6: RAW264.7 Lane 7: SH-SY5Y Lane 8: SW480 Lane 9: T47D Lane 10: U2OS



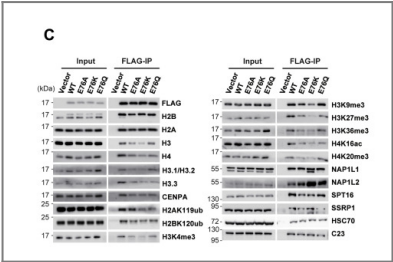
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: U-87 MG Lane 2: Karpas-299 Lane 3: HeLa Lane 4: HEK293 Lane 5: Mouse Lung Lane 6: mouse testis Lane 7: Rabbit brain



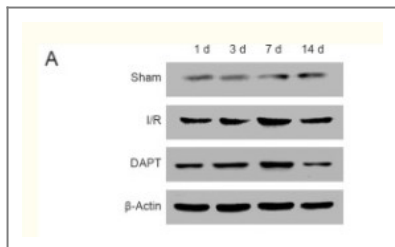
Postsurgical wound management and prevention of triple-negative breast cancer recurrence with a pyroptosis-inducing, photopolymerizable hydrogel JOURNAL OF CONTROLLED RELEASE Sanjun Shi WB Mouse 4 T1 cell



Wang, Yue, et al. "Fetal exposure to dichloroacetic acid and impaired cognitive function in the adulthood." Brain and Behavior 10.10 (2020): e01801.



Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." Journal of Biological Chemistry 296 (2021).



Wang, Jun-Jie, et al. "Neuroprotective effect of Notch pathway inhibitor DAPT against focal cerebral ischemia/reperfusion 3 hours before model establishment." *Neural regeneration research* 14.3 (2019): 452.

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
 Support: [tech@immunoway.com](mailto:tech@immunoway.com)  
 Telephone: 877-594-3616 (Toll Free), 408-747-0185  
 Website: <http://www.immunoway.com>  
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
 **$\beta$ -actin (PTR2364)**  
**Mouse mAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)