

## 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

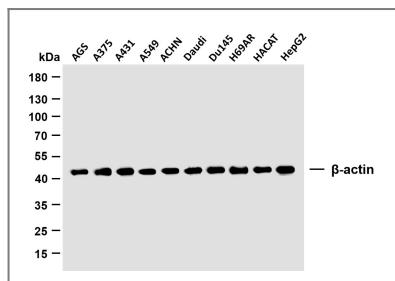
**Specificity**

This antibody detects endogenous levels of β-actin protein.

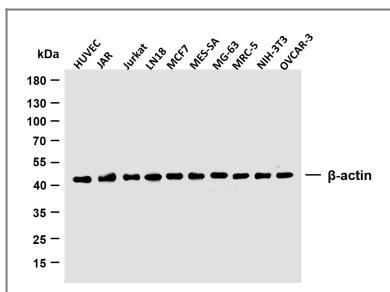
## Target Information

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>	

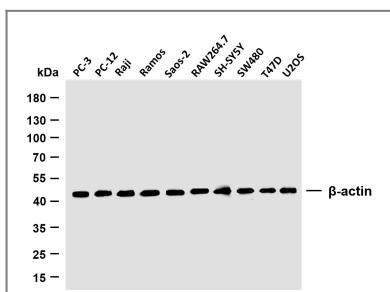
## Validation Data



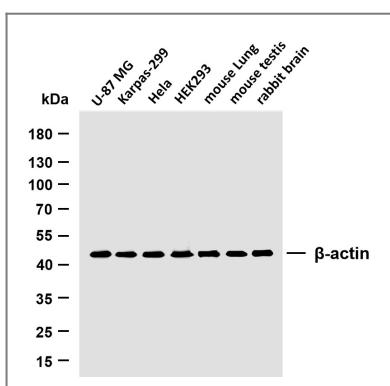
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: AGS Lane 2: A375 Lane 3: A431 Lane 4: A549 Lane 5: ACHN Lane 6: Daudi Lane 7: Du145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



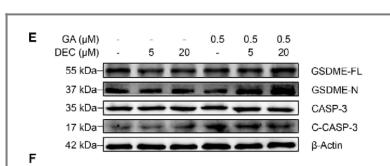
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: HUVEC Lane 2:JAR Lane 3:Jurkat Lane 4:LN18 Lane 5:MCF7 Lane 6: MES-SA Lane 7:MG-63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



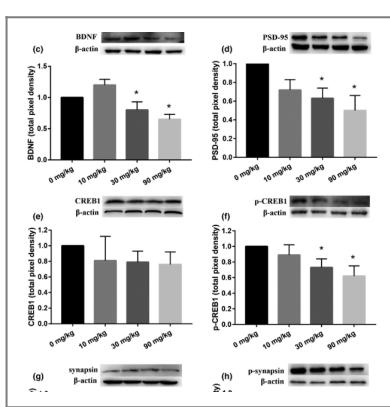
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: PC-3 Lane 2: PC-12 Lane 3: Raji Lane 4: Ramos Lane 5: Saos-2 Lane 6: RAW264.7 Lane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



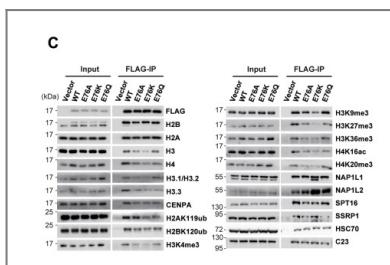
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-β-actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: U-87 MG Lane 2: Karpas-299 Lane 3: HeLa Lane 4: HEK293 Lane 5: Mouse Lung Lane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



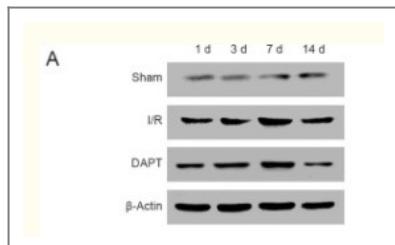
Postsurgical wound management and prevention of triple-negative breast cancer recurrence with a pyroptosis-inducing, photopolymerizable hydrogel  
JOURNAL OF CONTROLLED RELEASE Sanjun Shi WB Mouse 4 T1 cell



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



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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.

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 Mouse mAb**

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