

# **β-actin (PTR2364) Mouse mAb**

CatalogNo: YM3028 Orthogonal Validated 🔾

### **Key Features**

**Host Species** 

Mouse

MW

 42kD (Calculated) 42kD (Observed)

Human, Mouse, Rat

Isotype

Reactivity

• IgG1,Kappa

**Applications** WB,IF,IP,ELISA

## **Recommended Dilution Ratios**

WB 1:1000-5000 IF 1:100-500

ELISA 1:5000-50000

IP 1:50-1:200

### **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

## **Basic Information**

**Clonality** Monoclonal

**Clone Number** PTR2364

### Immunogen Information

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

**Specificity** This antibody detects endogenous levels of  $\beta$ -actin protein.

#### | Target Information

**Gene name** 

**ACTB** 

**Protein Name** 

Actin cytoplasmic 1

Organism	Gene ID	UniProt ID
Human	<u>60</u> ;	<u>P60709;</u>
Mouse	11461;	<u>P60710;</u>
Rat	<u>81822;</u>	<u>P60711;</u>

Cellular Localization

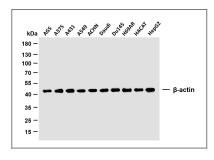
Cytoplasmic

**Tissue specificity** B-cell lymphoma, Brain, Cajal-Retzius cell, Eye, Fetal brain cortex, Foreskin, Hepatocellular car

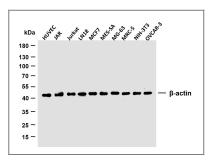
#### **Function**

Disease: Defects in ACTB are a cause of dystonia iuvenile-onset (DYTI) [MIM:607371]. DYTI is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTI 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 (Gactin) 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.,

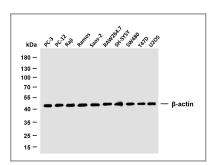
## Validation Data



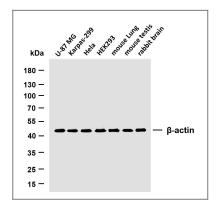
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti- $\beta$ -actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: AGS Lane 2: A375 Lane 3: A431 Lane 4: A549 Lane 5: ACHN Lane 6: Daudi Lane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



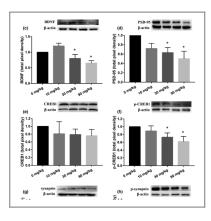
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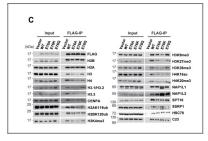
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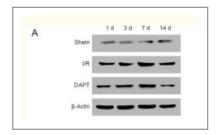
Postsurgical wound management and prevention of triple-negative breast cancer recurrence with a pryoptosis-inducing, photopolymerizable hydrogel JOURNAL OF CONTROLLED RELEASE Sanjun Shi WB Mouse 4 T1 cell



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.

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Please scan the QR code to access additional product information: β-actin (PTR2364) Mouse mAb

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