

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

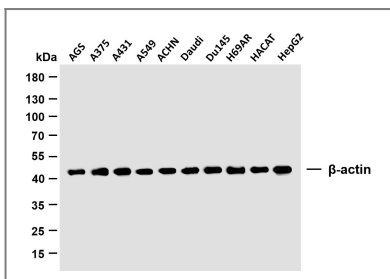
Organism	Gene ID	UniProt ID
Human	60 ;	P60709 ;
Mouse	11461 ;	P60710 ;
Rat	81822 ;	P60711 ;

Cellular Localization Cytoplasmic

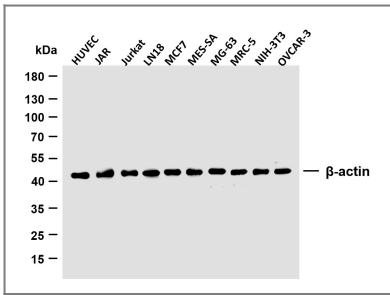
Tissue specificity B-cell lymphoma,Brain,Cajal-Retzius cell,Eye,Fetal brain cortex,Foreskin,Hepatocellular car

Function Disease:Defects in ACTB are a cause of dystonia 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.,

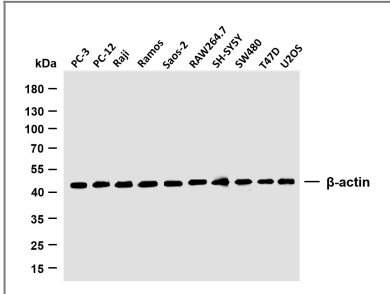
Validation Data



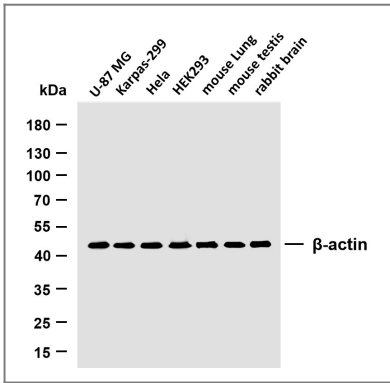
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti- β -actin (PTR2364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: AGS Lane 2: A375 Lane 3: A431 Lane 4: A549 Lane 5: ACHN Lane 6: Daudi Lane 7: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



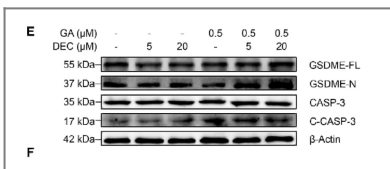
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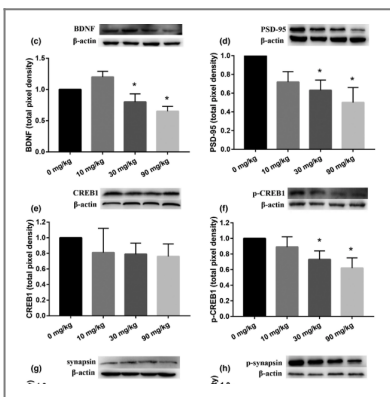
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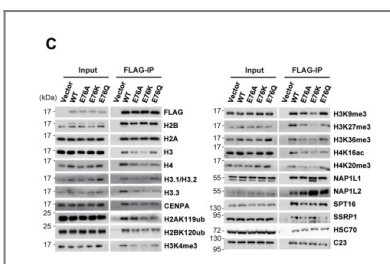
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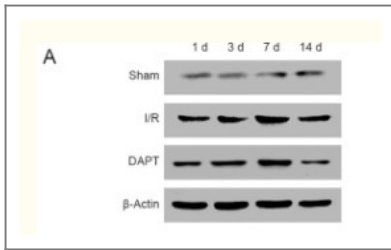
Postsurgical wound management and prevention of triple-negative breast cancer recurrence with a pyroptosis-inducing, photopolymerizable hydrogel
 JOURNAL OF CONTROLLED RELEASE Sanjun Shi WB Mouse 4 T1 cell



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.

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 β -actin (PTR2364)
Mouse mAb

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