

Monoclonal Mouse IgG_{2B} Clone # 818515

Catalog Number: MAB2669

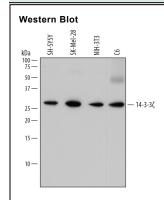
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human 14-3-3ζ in direct ELISAs and Western blots. Detects Mouse and Rat 14-3-3ζ in Western Blots. In direct ELISAs, no cross-reactivity with recombinant human 14-3-3 beta, theta, eta, gamma, sigma, or epsilon is observed.		
Source	Monoclonal Mouse IgG _{2B} Clone # 818515		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	<i>E. coli</i> -derived recombinant human 14-3-3ζ Asp2-Asn245 Accession # P63104		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.		

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

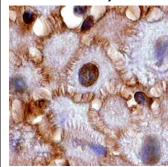
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	Recommended Concentration	Sample
Western Blot	0.2 μg/mL	See Below
Immunohistochemistry	8-25 μg/mL	See Below
Simple Western	2 μg/mL	See Below

DATA

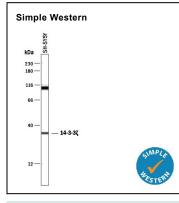


Detection of Human, Mouse, and Rat 14-3-3ζ by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line, SK-Mel-28 human malignant melanoma cell line, NIH-3T3 mouse embryonic fibroblast cell line, and C6 rat glioma cell line. PVDF membrane was probed with 0.2 µg/mL of Mouse Anti-Human 14-3-3ζ Monoclonal Antibody (Catalog # MAB2669) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for 14-3-3ζ at approximately 27 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



14-3-3ζ in Human Squamous Cell Carcinoma. 14-3-3ζ was detected in immersion fixed paraffin-embedded sections of human squamous cell carcinoma using Mouse Anti-Human 14-3-3ζ Monoclonal Antibody (Catalog # MAB2669) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei and plasma membrane. View our protocol for Chromogenic IHC Staining of Paraffinembedded Tissue Sections.



Detection of Human 14-3-3ζ by Simple Western™. Simple Western lane view shows lysates of SH-SY5Y human neuroblastoma cell line, loaded at 0.5 mg/mL. A specific band was detected for 14-3-3ζ at approximately 34 kDa (as indicated) using 2 μg/mL of Mouse Anti-Human 14-3-3ζ Monoclonal Antibody (Catalog # MAB2669). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

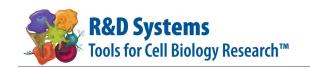
Reconstitution Sterile PBS to a final concentration of 0.5 mg/mL

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

 * Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 $^\circ$ C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

RED



Human 14-3-3ζ Antibody

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BACKGROUND

14-3-3 proteins are a highly conserved family of homo- and heterodimeric phosphoserine/threonine-binding proteins present in high abundance in all eukaryotic cells. 14-3-3 proteins were the first polypeptides shown to have pSer/Thr binding properties, generally recognizing the consensus sequences RSXpSXP and RXY/FXpSXP (where X is any amino acid). 14-3-3 proteins act as key regulators of intracellular signal transduction through their ability to bind specific motifs phosphorylated on serine or threonine. For example, the binding of 14-3-3 to phosphorylated BAD blocks its proapoptotic association with Bcl-XL. There are at least seven distinct 14-3-3 genes in vertebrates, alpha/beta, epsilon, eta, gamma, theta, sigma and zeta (α/β , ϵ , η , γ , τ/θ , σ , and ζ/δ). 14-3-3 zeta, also known as Tyrosine 3-Monooxygenase/Tryptophan 5-Monooxygenase Activation Protein, zeta isoform (gene name YWHAZ) is a 245 amino acid, 27 kDa protein.

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