14-3-3 ζ (h): 293T Lysate: sc-111414



The Power to Overtio

BACKGROUND

14-3-3 proteins regulate many cellular processes relevant to cancer biology, notably apoptosis, mitogenic signaling and cell-cycle checkpoints. Seven isoforms comprise this family of signaling intermediates, denoted 14-3-3 $\beta,\,\gamma,\,\epsilon,\,\zeta,\,\eta,\,\theta$ and $\sigma.$ 14-3-3 proteins form dimers that present two binding sites for ligand proteins, thereby bringing together two proteins that may not otherwise associate. These ligands largely share a 14-3-3 consensus binding motif and exhibit serine/threonine phosphorylation. 14-3-3 proteins function in broad regulation of these ligand proteins, by cytoplasmic sequestration, occupation of interaction domains and import/export sequences, prevention of degradation, activation/repression of enzymatic activity and facilitation of protein modification, and thus loss of expression contributes to a vast array of pathogenic cellular activities.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: YWHAZ (human) mapping to 8q22.3.

PRODUCT

14-3-3 ζ (h): 293T Lysate represents a lysate of human 14-3-3 ζ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

14-3-3 ζ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive 14-3-3 ζ antibodies. Recommended use: 10-20 μl per lane

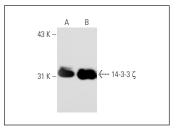
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

pan 14-3-3 (F-1): sc-166061 is recommended as a positive control antibody for Western Blot analysis of enhanced human 14-3-3 ξ expression in 14-3-3 ξ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



pan 14-3-3 (F-1): sc-166061. Western blot analysis of 14-3-3 ζ expression in non-transfected: sc-117752 (A) and human 14-3-3 ζ transfected: sc-111414 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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