**14-3-3 ζ (C-16): sc-1019**

**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 β, γ, ε, ζ, η, θ and α. 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**


**SOURCE**

14-3-3 ζ (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a relatively divergent domain of 14-3-3 ζ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1019 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

14-3-3 ζ (C-16) is recommended for detection of 14-3-3 ζ and, to a lesser extent, 14-3-3 β and α of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:2500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

14-3-3 ζ (C-16) is also recommended for detection of 14-3-3 ζ and, to a lesser extent, 14-3-3 β and α in additional species, including equine, bovine, porcine, ovine, canine and avian.

Molecular Weight of 14-3-3 ζ: 30 kDa.

Positive Controls: 14-3-3 ζ (h3): 293T Lysate: sc-111573, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

**RESEARCH USE**

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

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**