pan 14-3-3 (H-8): sc-1657

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 14-3-3β, 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

pan 14-3-3 (H-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-30 at the N-terminus of pan 14-3-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-1657 X, 200 µg/0.1 ml.

pan 14-3-3 (H-8) is available conjugated to HRP (sc-1657 HRP), 200 µg/ml, for WB, HRP) and ELISA; to either phycoerythrin (sc-1657 PE), fluorescein (sc-1657 FITC), Alexa Fluor® 488 (sc-1657 AF488), Alexa Fluor® 546 (sc-1657 AF546), Alexa Fluor® 594 (sc-1657 AF594) or Alexa Fluor® 647 (sc-1657 AF647), 200 µg/ml, for WB (HRP), IF, HRP) and FCM; and to either Alexa Fluor® 680 (sc-1657 AF680) or Alexa Fluor® 790 (sc-1657 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, pan 14-3-3 (H-8) is available conjugated to either TRITC (sc-1657 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-1657 AF405), 100 µg/2 ml, for IF, HCP) and FCM.

Blocking peptide available for competition studies, sc-1657 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

pan 14-3-3 (H-8) is recommended for detection of pan 14-3-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

pan 14-3-3 (H-8) is also recommended for detection of pan 14-3-3 in additional species, including equine, canine, bovine, porcine and avian.

pan 14-3-3 (H-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of pan 14-3-3: 30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or MOLT-4 cell lysate: sc-2233.

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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