

14-3-3 θ/τ (phospho-S232) polyclonal antibody

Catalog: BCP00122

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

The 14-3-3 family of proteins plays a key regulatory role in signal transduction, checkpoint control, apoptotic and nutrient-sensing pathways. 14-3-3 proteins are highly conserved and ubiquitously expressed. There are at least seven isoforms, β , γ , ϵ , σ , ζ , τ , and η that have been identified in mammals. The initially described α and δ isoforms are confirmed to be phosphorylated forms of β and ζ , respectively. Through their amino-terminal α helical region, 14-3-3 proteins form homo- or heterodimers that interact with a wide variety of proteins: transcription factors, metabolic enzymes, cytoskeletal proteins, kinases, phosphatases, and other signaling molecules. The interaction of 14-3-3 proteins with their targets is primarily through a phospho-Ser/Thr motif. However, binding to divergent phospho-Ser/Thr motifs, as well as phosphorylation independent interactions has been observed. 14-3-3 binding masks specific sequences of the target protein, and therefore, modulates target protein localization, phosphorylation state, stability, and molecular interactions. 14-3-3 proteins may also induce target protein conformational changes that modify target protein function. Distinct temporal and spatial expression patterns of 14-3-3 isoforms have been observed in development and in acute response to extracellular signals and drugs, suggesting that 14-3-3 isoforms may perform different functions despite their sequence similarities. Several studies suggest that 14-3-3 isoforms are differentially regulated in cancer and neurological syndromes.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 28 kDa

Swiss-Prot:

P27348

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 97% (by SDS-PAGE).

Applications:

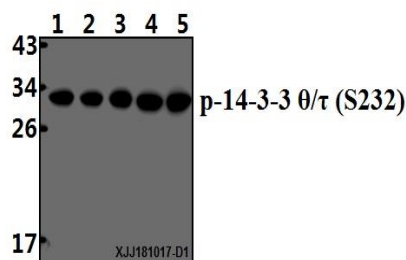
WB: 1:500~1:1000

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -22 °C long term. Avoid freeze-thaw cycles.

Specificity:

14-3-3 θ/τ (phospho-S232) polyclonal antibody detects endogenous levels of 14-3-3 θ/τ protein only when phosphorylated at Ser232.

DATA:

Western blot (WB) analysis of 14-3-3 θ/τ (phospho-S232) polyclonal antibody at 1:500 dilution

Lane1:A549 whole cell lysate(40 μ g)

Lane2:Hela whole cell lysate(40 μ g)

Lane3:The Brain tissue lysate of Rat(40 μ g)

Lane4:HEK293T whole cell lysate(40 μ g)

Lane5:CT-26 whole cell lysate(40 μ g)

Note:

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