Product Data Sheet
14-3-3 ζ/δ (phospho Thr232) Rabbit Polyclonal Antibody

Product name:	14-3-3 ζ/δ (phospho Thr232) Rabbit Polyclonal Antibody
Cat number:	ABN04178
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human 14-3-3 zeta/delta around the phosphorylation site of Thr232. AA range:196-245
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	28kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Synonyms:	YWHAZ; 14-3-3 protein zeta/delta; Protein kinase C inhibitor protein 1; KCIP-1

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Background:

This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Several transcript variants that differ in the 5' UTR but that encode the same protein have been identified for this gene. [provided by RefSeq, Oct 2008],caution:Was originally (PubMed:1577711) thought to have phospholipase A2 activity.,function:Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathway. Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif. Binding generally results in the modulation of the activity of the binding partner.,PTM:The delta, brain-specific form differs from the zeta form in being phosphorylated (By similarity). Phosphorylation on Ser-184 by MAPK8; promotes dissociation of BAX and translocation of BAX to mitochondria. Phosphorylation on Ser-58 by PKA; disrupts homodimerization and heterodimerization with YHAE and TP53. This phosphorylation appears to be activated by sphingosine. Phosphorylation on Thr-232; inhibits binding of RAF1.,similarity:Belongs to the 14-3-3 family.,subcellular location:Located to stage I to stage IV melanosomes.,subunit:Homodimer. Heterodimerizes with YWHAE. Homo- and hetero-dimerization is inhibited by phosphorylation on Ser-58. Interacts with FOXO4, NOXA1, SSH1 and ARHGEF2. Interacts with PCTK1 and BSPRY (By similarity). Interacts with WEE1 (C-terminal) (By similarity). Interacts with MLF1 (phosphorylated form); the interaction retains it in the cytoplasm (By similarity). Interacts with Thr-phosphorylated ITGB2 (By similarity). Interacts with Pseudomonas aeruginosa exoS (unphosphorylated form). Interacts with BAX; the interaction occurs in the cytoplasm. Under stress conditions, MAPK8-mediated phosphorylation releases BAX to mitochondria. Interacts with phosphorylated RAF1; the interaction is inhibited when YWHAZ is phosphorylated on Thr-232. Interacts with TP53; the interaction enhances p53 transcriptional acivity. The Ser-58 phosphorylated form inhibits this interaction and p53 transcriptional activity. Interacts with ABL1 (phosphorylated form); the interaction retains ABL1 in the cytoplasm. Interacts with AANAT ('Thr-31' phosphorylated form); the interaction modulates AANAT enzymatic activity through preventing dephosphorylation and/or proteolysis and stabilizing substrate binding. Subsequently, a second molecule of AANAT ('Ser-205' phosphorylated form), can bind the other YWHAZ monomer with similar effect. Interacts with AKT1; the interaction phosphorylates YWHAZ and modulates dimerization.,