

Summary

Production Name	14-3-3 ζ/δ (phospho Thr232) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IHC,WB
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	YWHAZ
Alternative Names	YWHAZ; 14-3-3 protein zeta/delta; Protein kinase C inhibitor protein 1; KCIP-1
Gene ID	7534.0
SwissProt ID	P63104.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

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000
Molecular Weight	28kD



Background

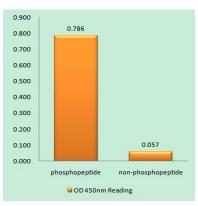
This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Several transcript variants that differ in the 5& apos; 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 activity. 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.,

Research Area

Akt_PKB;Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;Neurotrophin;Pathogenic Escherichia coli infection;

Image Data

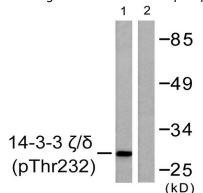




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using 14-3-3 zeta/delta (Phospho-Thr232) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using 14-3-3 zeta/delta (Phospho-Thr232) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with UV 15 ', using 14-3-3 zeta/delta (Phospho-Thr232) Antibody. The lane on the right is blocked with the phospho peptide.

Note

For research use only.