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# 14-3-3 ζ/δ (Phospho Thr232) Rabbit pAb

CatalogNo: YP0709 Orthogonal Validated 💽

## Key Features

Host Species • Rabbit	Reactivity <ul> <li>Human,Mouse,Rat</li> </ul>	Applications • WB,IHC,IF,ELISA
MW • 28kD (Observed)	Isotype • IgG	

### **Recommended Dilution Ratios**

WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:20000 IF 1:50-200

## **Storage**

Storage\*-15°C to -25°C/1 year(Do not lower than -25°C)FormulationLiquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## **Basic Information**

Clonality Polyclonal

## Immunogen Information

**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

Specificity

Phospho-14-3-3  $\zeta/\delta$  (T232) Polyclonal Antibody detects endogenous levels of 14-3-3  $\zeta/\delta$  protein only when phosphorylated at T232.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):SDtQG

## Target Information

Gene name	YWHAZ		
Protein Name	14-3-3 protein zeta/delta <b>Organism</b>	Gene ID	UniProt ID
	Human	<u>7534;</u>	<u>P63104;</u>
	Mouse	<u>22631;</u>	<u>P63101;</u>
	Rat	<u>25578;</u>	<u>P63102;</u>

### Cellular

Cytoplasm . Melanosome . Located to stage I to stage IV melanosomes.

#### Localization

#### Tissue specificity B-cell lymphoma, Bone marrow

**Function** 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 heterodimerization is inhibited by phosphorylation on Ser-58. Interacts with FOXO4, NOXA1, SSH1 and ARHGEF2. Interacts with PCTK1 and BSPRY (By similarity). Interacts with WEE1 (Cterminal) (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.,

## Validation 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.

## **Contact information**

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Please scan the QR code to access additional product information: 14-3-3 ζ/δ (Phospho Thr232) Rabbit pAb For Research Use Only. Not for Use in Diagnostic Procedures.

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