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Anti-14-3-3 zeta (Phospho-S58) Antibody

Catalog # AP59734

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P63104
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Chicken, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27745

Additional Information

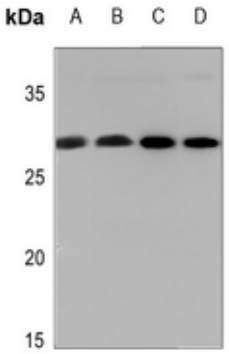
Gene ID	7534
Other Names	14-3-3 protein zeta/delta; Protein kinase C inhibitor protein 1; KCIP-1
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S58 of human 14-3-3 zeta protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

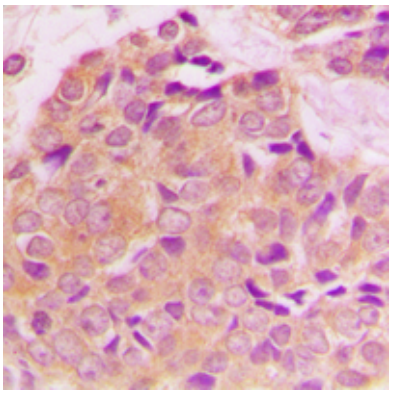
Name	YWHAZ
Function	Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:14578935, PubMed:15071501, PubMed:15644438, PubMed:16376338, PubMed:16959763, PubMed:31024343, PubMed:9360956). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:35662396). Binding generally results in the modulation of the activity of the binding partner (PubMed:35662396). Promotes cytosolic retention and inactivation of TFEB transcription factor by binding to phosphorylated TFEB (PubMed:35662396). Induces ARHGEF7 activity on RAC1 as well as lamellipodia and membrane ruffle formation (PubMed:16959763). In neurons, regulates spine maturation through the modulation of ARHGEF7 activity (By similarity).

Cellular Location	Cytoplasm. Melanosome. Note=Located to stage I to stage IV melanosomes.

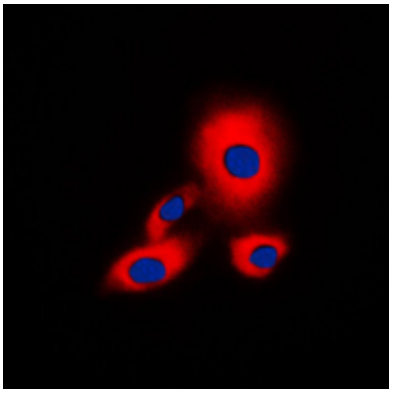
Images



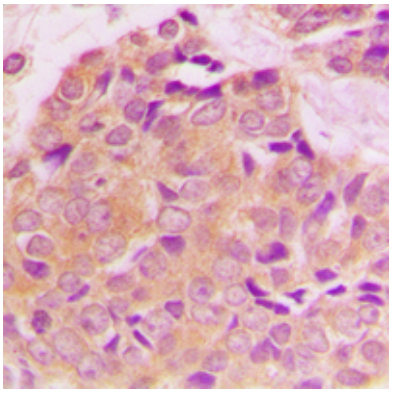
Western blot analysis of 14-3-3 zeta (Phospho-S58) expression in MCF7 (A), Jurkat (B), mouse brain (C), rat brain (D) whole cell lysates. (Predicted band size: 27 kD; Observed band size: 28 kD)



Immunohistochemical analysis of 14-3-3 zeta (Phospho-S58) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of 14-3-3 zeta (Phospho-S58) staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of 14-3-3 zeta (pS58) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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