

## 14-3-3 ζ (phospho Ser58) Polyclonal Antibody

<b>Catalog No :</b>	YP0853
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	14-3-3 ζ
<b>Fields :</b>	>>Cell cycle;>>Oocyte meiosis;>>PI3K-Akt signaling pathway;>>Hippo signaling pathway;>>Hepatitis C;>>Hepatitis B;>>Viral carcinogenesis
<b>Gene Name :</b>	YWHAZ
<b>Protein Name :</b>	14-3-3 protein zeta/delta
<b>Human Gene Id :</b>	7534
<b>Human Swiss Prot No :</b>	P63104
<b>Mouse Gene Id :</b>	22631
<b>Mouse Swiss Prot No :</b>	P63101
<b>Rat Gene Id :</b>	25578
<b>Rat Swiss Prot No :</b>	P63102
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human 14-3-3 zeta around the phosphorylation site of Ser58. AA range:24-73
<b>Specificity :</b>	Phospho-14-3-3 ζ (S58) Polyclonal Antibody detects endogenous levels of 14-3-3 ζ protein only when phosphorylated at S58.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

**Storage Stability :** -15 °C to -25 °C/1 year (Do not lower than -25 °C)

**Observed Band :** 30kD

**Cell Pathway :** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;Oocyte meiosis;Neurotrophin;Pathogenic Escherichia coli infection;

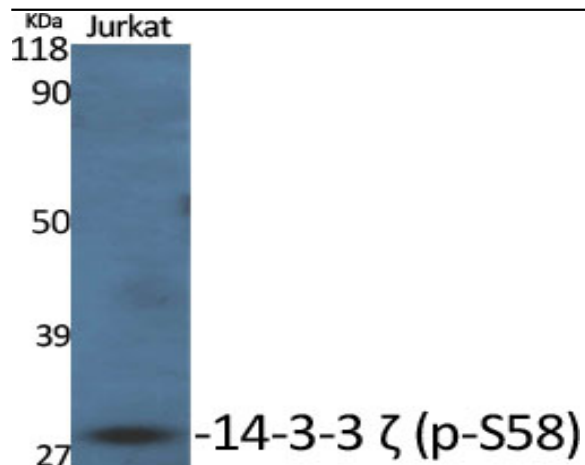
**Background :** This gene product belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. 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],

**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

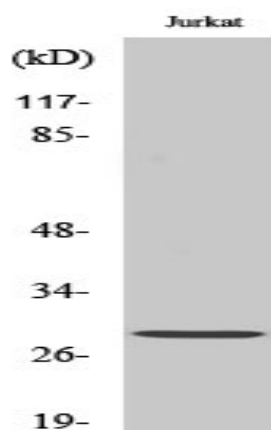
**Subcellular Location :** Cytoplasm . Melanosome . Located to stage I to stage IV melanosomes.

**Expression :** B-cell lymphoma,Bone marrow

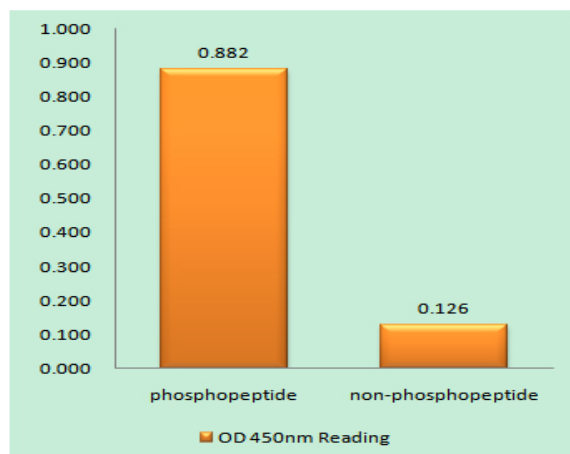
## Products Images



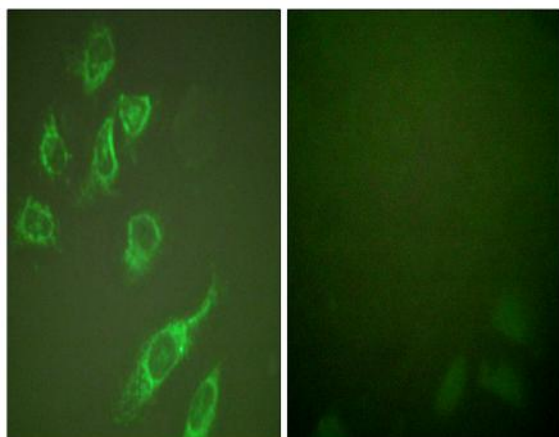
Western Blot analysis of various cells using Phospho-14-3-3  $\zeta$  (S58) Polyclonal Antibody diluted at 1:2000



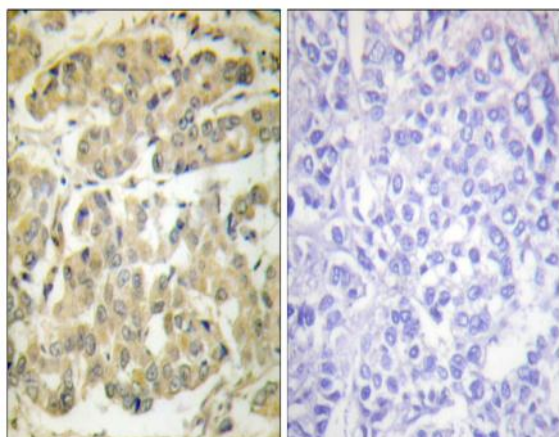
Western Blot analysis of Jurkat cells using Phospho-14-3-3  $\zeta$  (S58) Polyclonal Antibody diluted at 1:2000



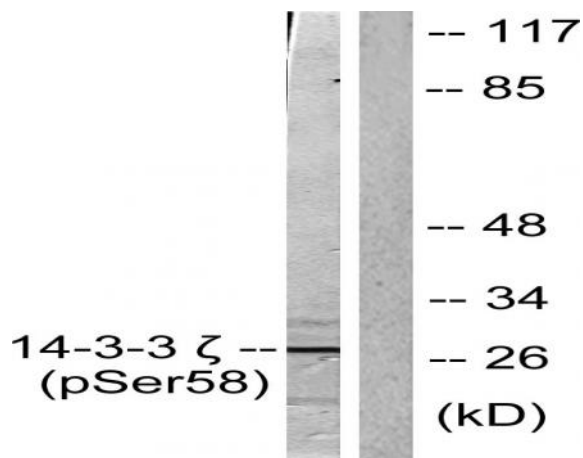
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using 14-3-3 zeta (Phospho-Ser58) Antibody



Immunofluorescence analysis of HeLa cells treated with PMA 125ng/ml 30', using 14-3-3 zeta (Phospho-Ser58) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using 14-3-3 zeta (Phospho-Ser58) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with UV 30', using 14-3-3 zeta (Phospho-Ser58) Antibody. The lane on the right is blocked with the phospho peptide.