

## 14-3-3 ζ Polyclonal Antibody

Catalog No: YT0007

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IP;IF;ELISA

**Target:**  $14-3-3 \zeta$ 

**Fields:** >>Cell cycle;>>Oocyte meiosis;>>PI3K-Akt signaling pathway;>>Hippo

signaling pathway;>>Hepatitis C;>>Hepatitis B;>>Viral carcinogenesis

Gene Name: YWHAZ

**Protein Name:** 14-3-3 protein zeta/delta

P63104

P63101

Human Gene Id: 7534

**Human Swiss Prot** 

No:

Mouse Gene ld: 22631

**Mouse Swiss Prot** 

No:

Rat Gene Id: 25578

Rat Swiss Prot No: P63102

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

14-3-3 zeta. AA range:24-73

**Specificity:** 14-3-3 ζ Polyclonal Antibody detects endogenous levels of 14-3-3 ζ protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. Immunoprecipitation: 2-5 ug:mg lysate.

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: 28kD

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

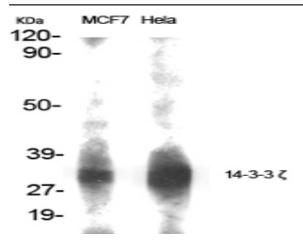
14-3-3 family., subcellular location: Located to

Subcellular Location:

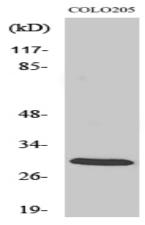
Cytoplasm . Melanosome . Located to stage I to stage IV melanosomes.

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

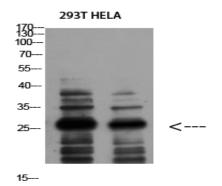
## **Products Images**



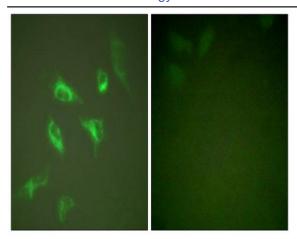
Western Blot analysis of various cells using 14-3-3  $\zeta$  Polyclonal Antibody diluted at 1:1000



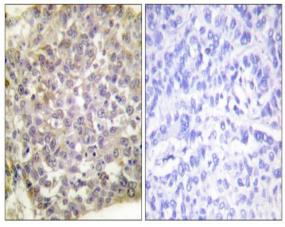
Western Blot analysis of COLO205 cells using 14-3-3  $\zeta$  Polyclonal Antibody diluted at 1:1000



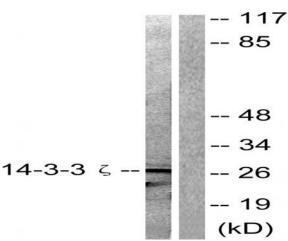
Western Blot analysis of 293T HELA using 14-3-3  $\zeta$  Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of HeLa cells, using 14-3-3 zeta Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using 14-3-3 zeta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Forskolin 40nM 30', using 14-3-3 zeta Antibody. The lane on the right is blocked with the synthesized peptide.