

14-3-3 ζ (Phospho-Ser58)

**Catalog Number:** 11181-1, 11181-2

**Amount:**  $50 \mu g/50 \mu 1$ ,  $100 \mu g/100 \mu 1$ 

Swiss-Prot No.: P63104

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20°C/1 year

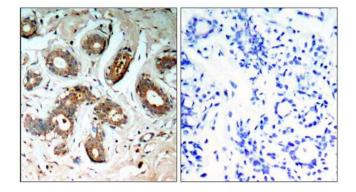
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human 14-3-3  $\zeta$  around the phosphorylation site of serine 58 (R-S-SP-W-R).

**Purification:** The antibody was affinity-purified from rabbit antiserum by epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

Specificity/Sensitivity: 14-3-3 ζ (Phospho-Ser58) antibody detects endogenous levels of 14-3-3  $\zeta$  only when phosphorylated at serine 58.

Reactivity: Human, Mouse, Rat

**Applications:** WB: 1:500~1:1000 IHC: 1:50-1:100 IF:1:100~1:200



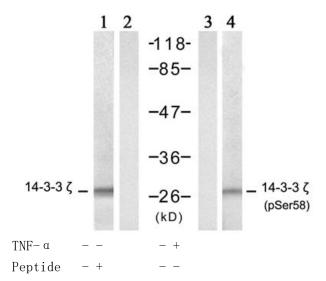
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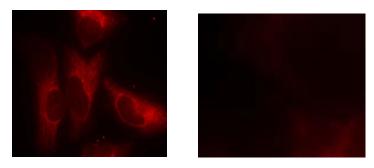
Technical: tech@swbio.com

P-Peptide - +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using 14-3-3 ζ (Phospho-Ser58) antibody (#11181).



Western blot analysis of extract from NIH/3T3 cells, untreated or treated with TNF-  $\alpha$  (20ng/ml, 5min), using 14-3-3  $\zeta$  (Ab-58) antibody (#21188, lane 1 and 2) and 14-3-3  $\zeta$  (Phospho-Ser58) antibody (#11181, lane 3 and 4).



Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and centrosomal staining using 14-3-3 ζ (Phospho-Ser58) antibody (#11181).

## 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.

**References:** Gu YM, et al. (2006) FEBS Lett; 580(1): 305-310 Powell DW, et al. (2003) Mol Cell Biol; 23(15): 5376-5387 Mackintosh *C.* (2004) Biochem J; 381(Pt 2): 329-342.