

Code No. 18644

**Anti-Human  
14-3-3  $\zeta$  Protein Rabbit IgG Affinity purify**Volume : 100  $\mu$ g

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**Introduction** : The 14-3-3 proteins are a family of conserved regulatory molecules expressed in all eukaryotic cells. A striking feature of the 14-3-3 proteins is their ability to bind a multitude of functionally diverse signaling proteins, including kinases, phosphatases, and transmembrane receptors. This plethora of interacting proteins allows 14-3-3 to play important roles in a wide range of vital regulatory processes, such as mitogenic signal transduction, apoptotic cell death, and cell cycle control.

**Antigen** : Synthetic peptide for a part of N-terminal of Human 14-3-3  $\zeta$  (MDKNELVQK)

**Purification** : Affinity purified with antigen peptide

**Form** : Lyophilized product from PBS containing 1 % BSA and 0.05 %  $\text{NaN}_3$

**How to use** : 1.0 mL deionized water will be added to the product (the conc. comes up 100  $\mu$ g/mL).

**Stability** : Lyophilized product, 5 years at 2 – 8  $^{\circ}\text{C}$   
: Solution, 2 years at –20  $^{\circ}\text{C}$

**Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after microwave treatment (10 min, 10mM citrate buffer, pH 6.0). The recommended concentration is about 5  $\mu$ g/mL, however, the concentration should be optimized by each laboratory.  
: This antibody can be used for western blotting in concentration of about 0.5  $\mu$ g/mL.

**Specificity** : Human 14-3-3 zeta specific  
Does not cross-react with human 14-3-3  $\beta$ ,  $\gamma$ ,  $\epsilon$ ,  $\eta$ ,  $\tau$

**Reference** : 1. Hermeking H, Lengauer C, Polyak K, He TC, Zhang L, Thiagalingam S, Kinzler KW, Vogelstein B. 14-3-3 sigma is a p53-regulated inhibitor of G2/M progression. *Mol Cell*. 1997 Dec; 1(1): 3-11.  
2. Chan TA, Hermeking H, Lengauer C, Kinzler KW, Vogelstein B. 14-3-3 Sigma is required to prevent mitotic catastrophe after DNA damage. *Nature*. 1999 Oct 7; 401(6753): 616-20.  
3. Nakajima T, Shimooka H, Weixa P, Segawa A, Motegi A, Jian Z, Masuda N, Ide M, Sano T, Oyama T, Tsukagoshi H, Hamanaka K, Maeda M. Immunohistochemical demonstration of 14-3-3 sigma protein in normal human tissues and lung cancers, and the preponderance of its strong expression in epithelial cells of squamous cell lineage. *Pathol Int*. 2003 Jun; 53(6): 353-60.

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*For research use only, not for use in diagnostic procedures.*

Code No. 18644

**Anti-Human  
14-3-3  $\zeta$  Protein Rabbit IgG Affinity purify**Volume : 10  $\mu$ g

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**Introduction** : The 14-3-3 proteins are a family of conserved regulatory molecules expressed in all eukaryotic cells. A striking feature of the 14-3-3 proteins is their ability to bind a multitude of functionally diverse signaling proteins, including kinases, phosphatases, and transmembrane receptors. This plethora of interacting proteins allows 14-3-3 to play important roles in a wide range of vital regulatory processes, such as mitogenic signal transduction, apoptotic cell death, and cell cycle control.

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**Purification** : Affinity purified with antigen peptide

**Form** : Lyophilized product from PBS containing 1 % BSA and 0.05 %  $\text{NaN}_3$

**How to use** : 0.1 mL deionized water will be added to the product (the conc. comes up 100  $\mu$ g/mL).

**Stability** : Lyophilized product, 5 years at 2 – 8  $^{\circ}\text{C}$   
: Solution, 2 years at –20  $^{\circ}\text{C}$

**Application** : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after microwave treatment (10 min, 10mM citrate buffer, pH 6.0). The recommended concentration is about 5  $\mu$ g/mL, however, the concentration should be optimized by each laboratory.  
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