

Code No. 18643

**Anti-Human
14-3-3 ϵ Protein Rabbit IgG Affinity Purify**

Volume : 100 μ g

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 of the C-terminal part of Human 14-3-3 Epsilon protein (EQNKEALQDVEDENQ)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

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

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °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) by several techniques such as Avidin Biotin Complex (ABC) Method. The optimal concentration is about 2 - 3 μ g/mL, however, the concentration should be optimized by each laboratory.
: This antibody can be used for western blotting in concentration of 1 - 5 μ g /mL.

Specificity : Human 14-3-3 Epsilon specific. Not cross-react with 14-3-3 Beta, Gamma, Zeta, Eta, Sigma and Tau. (Confirmed by western blotting.)

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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