

AP05568SU-N**Polyclonal Antibody to 14-3-3 protein epsilon - Serum**

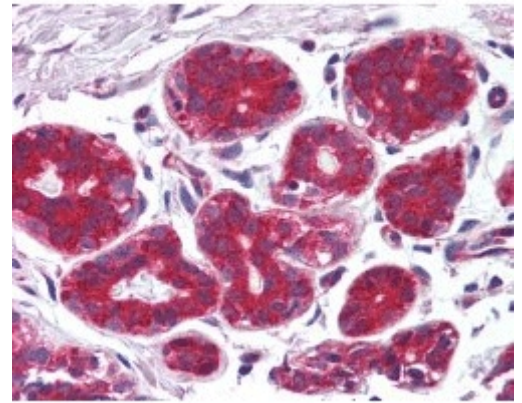
Alternate names:	14-3-3E, YWHAE
Quantity:	0.1 ml
Background:	14-3-3 epsilon is a member of the 14-3-3 family which consists of 30 kDa proteins that are involved in multiple protein kinase signalling pathways, regulation of cell cycle progression, cytoskeletal structure, transcription, intracellular trafficking and targeting. Protein interactions with 14-3-3 show distinct preference for its different isoforms and are regulated by phosphorylation of both 14-3-3 and the bound protein. 14-3-3 epsilon is expressed in all mammals. It is deleted in small cell lung cancers disrupting the G(2) checkpoint. During apoptosis, cleavage of 14-3-3 protein by caspase-3 increases the affinity between bad and Bcl-x(L). When bound by ERK, 14-3-3 epsilon is thought to deactivate heat shock factor 1 in cells recovering from heat shock. It is also a potential suicide susceptibility gene.
Uniprot ID:	P62258
NCBI:	NP_006752.1
GeneID:	7531
Host / Isotype:	Rabbit / IgG
Immunogen:	Synthetic peptide corresponding to acetylated N-terminal sequence of Sheep 14-3-3 epsilon AA Sequence: Ac . MDDREDLVYQAKC Remarks: Antiserum Preparation: Antisera to anti 14-3-3 epsilon N-terminus were raised by repeated immunisations of rabbits with highly purified antigen.
Format:	State: Liquid Serum containing 0.09% Sodium Azide as preservative
Applications:	ELISA. Western Blot: 1/3000. Detects a band of approximately 30kDa in HEK293 cell lysates. Immunohistochemistry on Paraffin Sections: 1/400. Requires antigen retrieval using heat treatment prior to staining of paraffin sections. <i>Positive Control:</i> Normal brain tissue. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises the acetylated N-terminal of 14-3-3 epsilon. The antibody may not react with recombinant proteins that are not N-acetylated.
Species Reactivity:	Tested: Bovine, Chicken, Human, Mouse, Rabbit, Rat, Sheep. Expected from sequence similarity: Mammals.
Storage:	Store the antibody undiluted at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf life: one year from despatch.

General Readings:

1. Martin H, Patel Y, Jones D, Howell S, Robinson K, Aitken A. Antibodies against the major brain isoforms of 14-3-3 protein. An antibody specific for the N-acetylated amino-terminus of a protein. FEBS Lett. 1993 Oct 4;331(3):296-303. PubMed PMID: 8375512.
2. Aitken, A. et al. (2006) 14-3-3 proteins: A historic overview. Seminars in Cancer Biology 16: 162-172.
3. Wang Z, Nesland JM, Suo Z, Trope CG, Holm R. The prognostic value of 14-3-3 isoforms in vulvar squamous cell carcinoma cases: 14-3-3 β and ϵ are independent prognostic factors for these tumors. PLoS One. 2011;6(9):e24843. doi: 10.1371/journal.pone.0024843. Epub 2011 Sep 15. PubMed PMID: 21935479.

Pictures:

Human Breast Epithelium stained with Rabbit anti 14-3-3 Epsilon antibody Cat.-No AP05568SU-N



Western blots of 14-3-3 isoforms in HEK293 cell extracts using 14-3-3 antibodies. Lane 1: anti-gamma 14-3-3 (AP05567SU-N) Lane 2: anti-zeta 14-3-3 (AP05572SU-N) Lane 3: anti-C-epsilon-14-3-3 (AP05565SU-N) Lane 4: anti-N-epsilon-14-3-3 (AP05568SU-N) Lane 5: anti-eta 14-3-3. (AP05566SU-N) The 14-3-3 isoforms run at 30kDa except epsilon 14-3-3

