

Polyclonal Antibody to 14-3-3 protein gamma - Serum

Alternate names:	KCIP-1, Protein kinase C inhibitor protein 1, YWHAG
Catalog No.:	AP05567SU-N
Quantity:	0.1 ml
Background:	<p>14-3-3 gamma 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.</p> <p>14-3-3 gamma is thought to play an important role in muscle, being induced by growth factors in human vascular smooth muscle cells, and being expressed in skeletal and heart muscles. An example is the gamma isoform binds musclespecific receptor tyrosine kinase regulating synaptic gene transmission. The gamma isoform binds amyloid betaprotein precursor intracellular domain fragment (AICD) and FE65, facilitating FE65dependent gene transactivation. The binding of 14-3-3 gamma to glial fibrillary acidic protein is important in the regulation of glial filaments. 14-3-3 gamma binds and may regulate CDK11 during the cell cycle and apoptosis. The gamma isoform is lowered in foetal Downs syndrome brains.</p>
Uniprot ID:	P61981
NCBI:	NP_036611.2
GeneID:	7532
Host / Isotype:	Rabbit / IgG
Immunogen:	Synthetic peptide of acetylated N-terminal amino acids 1-10 of sheep 14-3-3 gamma AA Sequence: Ac . VDREQLVQKAC
	Remarks: Antiserum Preparation: Antisera to sheep 14-3-3 gamma were raised by repeated immunisations of rabbit with highly purified antigen.
Format:	State: Liquid Serum containing 0.09% Sodium Azide as preservative
Applications:	ELISA. Western Blot: 1/6000-1/12000; detects a band of approximately 30kDa in HEK293 cell lysates. Immunohistochemistry on Paraffin Sections: 1/800. 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 gamma.
Species Reactivity:	Tested: Sheep, Mouse, Human, Bovine, Chicken, Rat. Expected from sequence similarity: Mammals.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. Martin, H. et al. (1993) Antibodies against major brain isoforms of 14-3-3 protein. An antibody specific for the Nacetylated aminotermius of a protein. FEBS 331: 296 - 303.
2. Aitken, A. et al. (2006) 14-3-3 proteins: A historic overview. Seminars in Cancer Biology 16: 162 - 172.
3. Wang, Z. et al. (2011) The prognostic value of 14-3-3 isoforms in vulvar squamous cell carcinoma cases: 14-3-3 β and e are independent prognostic factors for these tumors. PLoS One. 6: e24843.

Pictures: 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

