

**AP05566SU-N****Polyclonal Antibody to 14-3-3 protein eta - Serum****Alternate names:**

Protein AS1, YWHA1, YWHAH

**Quantity:**

0.1 ml

**Background:**

14-3-3 eta 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 eta is expressed principally in the brain although it is expressed at low levels in other tissues. The protein binds alphasynuclein, forming part of lewy bodies in parkinsons disease and has been linked to earlyonset schizophrenia. The eta isoform binds both gremlin 1, which is overexpressed in human cancers, and the DAL1/Protein 4.1B tumour suppressor. Furthermore the glucocorticoid receptor is positively regulated by 14-3-3eta.

AHP1046 may not react with recombinant proteins that are not Nacetylated.

**Uniprot ID:**[Q04917](#)**NCBI:**[NP\\_003396.1](#)**GeneID:**[7533](#)**Host / Isotype:**

Rabbit / IgG

**Immunogen:**

Synthetic peptide corresponding to acetylated N-terminal sequence of sheep 14-3-3 eta.

**AA Sequence:**

Ac . GDREQLLQRARC

**Remarks: Antiserum Preparation:** Antisera to sheep 14-3-3 eta were raised by repeated immunisations of rabbit with highly purified antigen.

**Format:****State:** Liquid Serum containing 0.09% Sodium Azide as preservative**Applications:****Western Blot:** Detects a band of approximately 30kDa in HEK293 cell lysates.**Immunohistochemistry on Paraffin Sections:** 1/3200. Requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody recognises 14-3-3 eta in all mammals.

This antibody may not react with recombinant proteins that are not N-acetylated.

**Species Reactivity:****Tested:** Sheep, Mouse, Human, Bovine, Chicken, Rabbit, 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 1433 protein. An antibody specific for the Nacetylated aminotermminus of a protein. FEBS 331: 296 - 303.
2. Aitken, A. et al. (2006) 1433 proteins: A historic overview. Seminars in Cancer Biology 16: 162 - 172.
3. Aitken, A. et al. (2006) 14-3-3 proteins: A historic overview. Seminars in Cancer Biology 16: 162-172.

**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

