

Datasheet: AHP1048

Description:	RABBIT ANTI 14-3-3 EPSILON (N-TERMINAL)
Specificity:	14-3-3 EPSILON (N-TERMINAL)
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			1/400
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			1/3000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Target Species	Sheep
Species Cross Reactivity	<p>Reacts with: Human, Bovine, Chicken, Mouse, Rabbit, Rat</p> <p>Based on sequence similarity, is expected to react with: Mammals</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
Product Form	Serum - liquid

Antiserum Preparation Antisera to sheep 14-3-3 epsilon N-terminus were raised by repeated immunisations of

rabbits with highly purified antigen.

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)

Immunogen

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

Peptide sequence: Ac.MDDREDLVYQAKC

External Database Links

UniProt:

[P62262](#)

[Related reagents](#)

Entrez Gene:

[443300](#)

LOC443300

[Related reagents](#)

RRID

AB_2241810

Specificity

Rabbit anti 14-3-3 antibody recognizes the acetylated N-terminal of 14-3-3 epsilon, a member of the 14-3-3 family which consists of 30 kDa proteins 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 checkpoint ([Wang, Z. et al. 2011](#)). 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.

Rabbit anti 14-3-3 antibody may not react with recombinant proteins that are not N-acetylated.

Histology Positive Control Tissue

Normal brain.

Western Blotting

Rabbit anti 14-3-3 antibody detects a band/s of approximately 30kDa in HEK293 cell lysates.

References

1. Martin, H. *et al.* (1993) 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. 331 \(3\): 296-303.](#)
2. Wang, Z. *et al.* (2011) 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. 6: e24843.](#)
3. Taurino, F. *et al.* (2014) Short-term type-1 diabetes differentially modulates 14-3-3 proteins in rat brain and liver. [Eur J Clin Invest. 44 \(4\): 350-8.](#)

4. De, S. *et al.* (2012) Expression of 14-3-3 protein isoforms in mouse oocytes, eggs and ovarian follicular development [BMC Res Notes. 5: 57.](#)

Further Reading 1. Aitken, A. (2006) 14-3-3 proteins: a historic overview. [Semin Cancer Biol. 16 \(3\): 162-72.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10081 available at: 10081: <https://www.bio-rad-antibodies.com/uploads/MSDS/10081.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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