

Datasheet: AHP1051

Description:	RABBIT ANTI 14-3-3 TAU/THETA
Specificity:	14-3-3 TAU/THETA
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)	▪			1/60
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	Reacts with: Human, Bovine, Chicken, Rat, Mouse, Rabbit Based on sequence similarity, is expected to react with: Mammals N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Serum - liquid
Antiserum Preparation	Antisera to sheep 14-3-3 tau/theta were raised by repeated immunisations of rabbit with highly purified antigen.
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Immunogen	Synthetic peptide corresponding to acetylated N-terminal sequence of sheep 14-3-3 tau/theta. Peptide sequence: Ac.MEKTELIQKAC
Specificity	Rabbit anti 14-3-3 τ/θ antibody recognizes 14-3-3 tau/theta in all mammals. It is a member of the

14-3-3 family which consists of 30 kDa proteins involved in multiple cell signalling pathways, regulation of cell cycle progression, cytoskeletal structure, transcription, intracellular trafficking and targeting. Protein interactions with 14-3-3 show distinct preferences for its different isoforms and are regulated by phosphorylation of both 14-3-3 and the bound protein.

14-3-3 tau/theta is primarily expressed in T-cells although it occurs at lower levels in the brain, heart, pancreas placenta and kidneys. It plays a role in cell cycle progression via interaction with p27(Kip1). Along with COPI, the theta isoform binds the GB1 RSR sequence involved in protein trafficking. The isoform forms a complex with Hsp60 and cellular prion protein which may be involved in prion diseases. Elevated levels of 14-3-3 tau/theta are observed in amyotrophic lateral sclerosis. 14-3-3 tau/theta also binds BCR/Abl, bacterial effector protein Tir, yes-associated protein and the FSH receptor.

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

Histology Positive Control Tissue

Normal tonsil tissue.

Western Blotting

AHP1051 detects a band 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.

Shelf Life

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](#)

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

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

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

Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[RABBIT ANTI 14-3-3 ISOFORM PANEL \(PAN017\)](#)

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

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