

Datasheet: AHP1051

Description:	RABBIT ANTI 14-3-3 TAU/THETA
Specificity:	14-3-3 TAU/THETA
Format:	Serum
<b>Product Type:</b>	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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. 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.
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 <sub>3</sub> )
Immunogen	Synthetic peptide corresponding to acetylated N-terminal sequence of sheep 14-3-3 tau/theta.
	Peptide sequence: Ac.MEKTELIQKAC
RRID	AB_770060
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 it's 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/AbI, bacterial effector protein Tir, yes-associated protein and the FSH receptor.
	Rabbit anti 14-3-3 $\tau/\theta$ 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	<ol> <li>Martin, H. <i>et al.</i> (1993) Antibodies against the major brain isoforms of 14-3-3 protein. An antibody specific for the N-acetylated amino-terminus of a protein. <u>FEBS Lett. 331 (3): 296-303.</u></li> <li>Wang, Z. <i>et al.</i> (2011) The prognostic value of 14-3-3 isoforms in vulvar squamous cell carcinoma cases: 14-3-3β and ε are independent prognostic factors for these tumors. <u>PLoS One. 6: e24843.</u></li> </ol>
	<ol> <li>Taurino, F. <i>et al.</i> (2014) Short-term type-1 diabetes differentially modulates 14-3-3 proteins in rat brain and liver. <u>Eur J Clin Invest. 44 (4): 350-8.</u></li> <li>De, S. <i>et al.</i> (2012) Expression of 14-3-3 protein isoforms in mouse oocytes, eggs and ovarian follicular development <u>BMC Res Notes. 5: 57.</u></li> </ol>
Further Reading	1. Aitken, A. (2006) 14-3-3 proteins: a historic overview. <u>Semin Cancer Biol. 16 (3):</u> 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 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...) <u>FITC</u>
Goat Anti Rabbit IgG (H/L) (STAR124...) <u>HRP</u>

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

Sheep Anti Rabbit IgG (STAR35...) RPE

Sheep Anti Rabbit IgG (STAR36...) <u>DyLight®488</u>, <u>DyLight®680</u>, <u>DyLight®800</u>

## **Recommended Useful Reagents**

### TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

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 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

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