

Datasheet: AHP1044

| Description:  | RABBIT ANTI 14-3-3 BETA |  |
|---------------|-------------------------|--|
| Specificity:  | 14-3-3 BETA             |  |
| 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 <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) | •   |    |                | 1/600              |
| 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<br>Reactivity | Reacts with: Mouse, Rabbit, Human, Rat, Bovine Does not react with:Amphibia, Fungal, Fish, Invertebrates, Reptile, Yeast  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 beta were raised by repeated immunisations of rabbit with highly

|                                      | purified antigen.   |  |  |
|--------------------------------------|---|--|--|
| Preservative<br>Stabilisers          | 0.09% Sodium Azide (NaN <sub>3</sub> )  |  |  |
| Immunogen                            | Synthetic peptide corresponding to acetylated N-terminal sequence of sheep 14-3-3 beta  |  |  |
|                                      | Peptide sequence: Ac.TMDKSELVC  |  |  |
| External Database<br>Links           | UniProt: P68251 Related reagents  |  |  |
| RRID                                 | AB_2217621  |  |  |
| Specificity                          | <b>Rabbit anti 14-3-3</b> β <b>antibody</b> recognizes the acetylated N-terminal of 14-3-3 β. It 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 it's different isoforms and are regulated by phosphorylation of both 14-3-3 and the bound protein.  14-3-3 β plays a role in the pathogenesis of systemic lupus erythematosus and is involved in negative regulation of p90 ribosomal S6 kinase activity and tuberous sclerosis tumour suppressor proteins. It also binds IGF-1 receptor, RAF1 and CDC25 phosphatases.  Rabbit anti 14-3-3 β antibody may not react with recombinant proteins that are not N-acetylated.  |  |  |
| Histology Positive<br>Control Tissue | Normal brain tissue   |  |  |
| Western Blotting                     | AHP1044 detects a band of approximately 30kDa in HEK293 cell lysates  |  |  |
| References                           | <ol> <li>Martin, H. <i>et al.</i> (1993) Antibodies against major brain isoforms of 14-3-3 protein. An antibody specific for the N-acetylated amino-terminus of a protein. <u>FEBS Lett. 331: 296-303.</u></li> <li>Chen, H.K. <i>et al.</i> (2003) Interaction of Akt-phosphorylated ataxin-1 with 14-3-3 mediates neurodegeneration in spinocerebellar ataxia type 1. <u>Cell. 113: 457-68.</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> <li>Baxter, H.C. <i>et al.</i> (2002) Immunolocalisation of 14-3-3 isoforms in normal and scrapie-infected murine brain. <u>Neuroscience. 109: 5-14.</u></li> <li>Chaudhri, M. <i>et al.</i> (2003) Mammalian and yeast 14-3-3 isoforms form distinct patterns of dimers in vivo. <u>Biochem Biophys Res Commun. 300: 679-85.</u></li> <li>Taurino, F. <i>et al.</i> (2014) Short-term Type-1 diabetes differentially modulates 14-3-3</li> </ol> |  |  |

**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** Material Safety Datasheet documentation #10081 available at: Information 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)

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

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

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