

#### RayBiotech, Inc.

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## Certificate of Analysis and Data Sheet

# **RABBIT ANTI 14-3-3 EPSILON (N-TERMINAL)**

With HRP-conjugated Secondary Antibody

Catalog No.SpeciesIsotypeDS-PB-00006SheepRabbit IgG

## Preparation

**Immunogen**: Synthetic peptide corresponding to acetylated N-terminal sequence of sheep 14-3-3

epsilon.

**Purification:** Antisera to sheep 14-3-3 epsilon N-terminus were raised by repeated immunisations of

rabbits with highly purified antigen.

### Specificity

DS-PB-00007 recognizes the acetylated N-terminal of 14-3-3 epsilon. 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 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(2) checkpoint. 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

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

cells recovering from heat shock. It is also a potential suicide susceptibility gene.

Reacts with: Human, Rat, Mouse, Bovine, Chicken, Rabbit. Antibody reactivity and working conditions may vary between species.

#### **Formulation**

**Product Form:** Serum - liquid

Preservative & Stabilizers: 0.09% Sodium Azide

### Histology Positive Control Tissue

Normal brain tissue



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### Storage

18 months shelf life. Store at +4°C or at -20°C if preferred.

This product should be stored undiluted. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.

Please avoid freeze-thaw cycles.

#### **Applications**

Table Summary of antibody applications and working conditions

	-	-		Recommended
Options Functions	YES	NO	Not determined	Work dilution or concentration
ELISA	•			
Western Blotting	•			DS-PB-00007 detects a band/s of approximately 30kDa in HEK293 cell lysates.
Immunohistology - frozen			•	
Immunohistology - paraffin	•			This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

## Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000



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#### Reference

1. Martin, H. et al. (1993) Antibodies against major brain isoforms of 14-3-3 protein. An antibody specific for the N-acetylated amino-terminus of a protein. FEBS 331: 296-303.

2. Aitken, A. et al. (2006) 14-3-3 proteins: A historic overview. Seminars in Cancer Biology 16: 162-172.