

# 14-3-3 Family Antibody Sampler Kit

Cat# AK0101

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

## PRODUCT DESCRIPTION

The 14-3-3 family of proteins plays a key regulatory role in signal transduction, checkpoint control, apoptotic and nutrient-sensing pathways. 14-3-3 proteins are highly conserved and ubiquitously expressed. There are at least seven isoforms,  $\beta$ ,  $\gamma$ ,  $\epsilon$ ,  $\sigma$ ,  $\zeta$ ,  $\tau$ , and  $\eta$  that have been identified in mammals. The initially described  $\alpha$  and  $\delta$  isoforms are confirmed to be phosphorylated forms of  $\beta$  and  $\zeta$ , respectively. Through their amino-terminal  $\alpha$  helical region, 14-3-3 proteins form homo- or heterodimers that interact with a wide variety of proteins: transcription factors, metabolic enzymes, cytoskeletal proteins, kinases, phosphatases, and other signaling molecules. The interaction of 14-3-3 proteins with their targets is primarily through a phospho-Ser/Thr motif. However, binding to divergent phospho-Ser/Thr motifs, as well as phosphorylation independent interactions has been observed. 14-3-3 binding masks specific sequences of the target protein, and therefore, modulates target protein localization, phosphorylation state, stability, and molecular interactions. 14-3-3 proteins may also induce target protein conformational changes that modify target protein function. Distinct temporal and spatial expression patterns of 14-3-3 isoforms have been observed in development and in acute response to extracellular signals and drugs, suggesting that 14-3-3 isoforms may perform different functions despite their sequence similarities. Several studies suggest that 14-3-3 isoforms are differentially regulated in cancer and neurological syndromes.

## PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340411	14-3-3 beta/alpha Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340412	14-3-3 epsilon Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340413	14-3-3 zeta/delta Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, IP, ELISA	Human, Mouse, Rat	Rabbit
A340414	14-3-3 theta Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit
A340415	14-3-3 theta Polyclonal Antibody	20 $\mu$ L	WB, IHC, IF, ELISA	Human, Mouse, Rat	Rabbit

<b>A1013s</b>	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB,ELISA	Rabbit	Goat
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## **PRODUCT USE LIMITATION**

These products are intended for research use only.