



## PKA II $\beta$ reg Polyclonal Antibody

Cat #: ABP52218

Size: 30 $\mu$ l /100 $\mu$ l /200 $\mu$ l

### Product Information

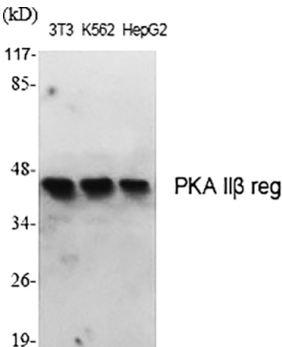
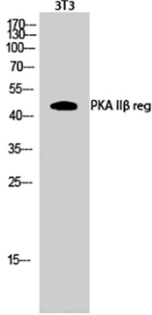
	<b>Product Name:</b> PKA II $\beta$ reg Polyclonal Antibody		
	<b>Applications:</b> WB, IHC-P, ELISA		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human, Mouse, Rat		
<b>REF</b>	<b>Catalog Number:</b> ABP52218	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**Background:** cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. Protein kinase cAMP-dependent type II regulatory subunit beta encoded by PRKAR2B is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity. The studies also suggest that this subunit may mediate the gene induction and cataleptic behavior induced by haloperidol.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:500-1:2000), IHC-P (1:100-1:300), ELISA (1:10000). Not yet tested in other applications.

**Storage Buffer:** PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

 <p>(kD)</p> <p>3T3 K562 HepG2</p> <p>117-</p> <p>85-</p> <p>48-</p> <p>34-</p> <p>26-</p> <p>19-</p> <p>PKA IIβ reg</p>	<p>Fig.1. Western Blot analysis of various cells using PKA IIβ reg Polyclonal Antibody.</p>
 <p>3T3</p> <p>170-</p> <p>150-</p> <p>100-</p> <p>70-</p> <p>55-</p> <p>40-</p> <p>35-</p> <p>25-</p> <p>15-</p> <p>PKA IIβ reg</p>	<p>Fig.2. Western Blot analysis of 3T3 cells using PKA IIβ reg Polyclonal Antibody.</p>

**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.