

## Technical Data Sheet

## PKA Sampler Kit

## Product Information

<b>Material Number:</b>	<b>611420</b>
<b>Size:</b>	10 µg
<b>Concentration:</b>	250 µg/ml
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

## Description

cAMP-dependent Protein Kinase (PKA) is composed of two distinct subunits: catalytic (C) and regulatory (R). Four regulatory subunits have been identified: RI $\alpha$ , RI $\beta$ , RII $\alpha$ , and RII $\beta$ . These subunits define type I and II cAMP-dependent protein kinases. Following binding of cAMP, the regulatory subunits dissociate from the catalytic subunits, rendering the enzyme active. Type I and type II holoenzymes have three potential C subunits (C $\alpha$ , C $\beta$ , or C $\gamma$ ). Type II PKA can be distinguished by autophosphorylation of the R-subunits, while type I PKA binds MgATP with high affinity. Most cells express both type I and type II PKAs. Although the R $\alpha$  isoforms are ubiquitously expressed, the R $\beta$  isoforms are predominant in nervous and adipose tissues. There are indications that the deletion of the gene for PKARII $\beta$  results in lack of long-term potentiation in a select group of hippocampal cells, suggesting an important role for this protein in the neurosciences.

Antibody	Component No.	50µg Cat. No.	Isotype	MW	WB	IP	IF	IH	Human	Dog	Rat	Mouse	Chick	Control	Dilution
AKAP79	51-9001894	610314	IgG1	79	+	-	+	+	+					SW-13	1:250
AKAP95	51-9001904	610994	IgG1	95	+		+		+					Jurkat	1:250
AKAP149	51-9001903	610720	IgG1	149	+	nat/den	+	-	+		+			HeLa	1:500
AKAP220	51-9001901	610704	IgG1	220	+	-	+	+			+			Rat Cerebrum	1:250
AKAP-KL	51-9001905	611134	IgG1	105-130	+		+				+	+		M. Kidney	1:1000
MAP2B	51-9002018	610460	IgG1	280	+	-	+	+	+		+	+		Rat Cerebrum	1:2500
PKA <sub>C</sub>	51-9002066	610980	IgG2b	40	+		+		+	+	+	+		HeLa	1:1000
PKA <sub>RI</sub>	51-9002044	610165	IgG2b	48	+	nat	+	-	+	+	+	+	+	Human Endothelial	1:250
PKA <sub>RI<math>\alpha</math></sub>	51-9002056	610609	IgG1	49	+	-	-	-	+	+	+	+	+	Rat Cerebrum	1:250
PKA <sub>RII<math>\alpha</math></sub>	51-9002051	612242	IgG1	51	+	-	+		+	+	+	+		K-562	1:1000
PKA <sub>RII<math>\beta</math></sub>	51-9002058	610625	IgG1	53	+	-	+	-	+	+	+	+	+	Human Endothelial	1:1000

IP: nat = native condition, den = denaturing conditions

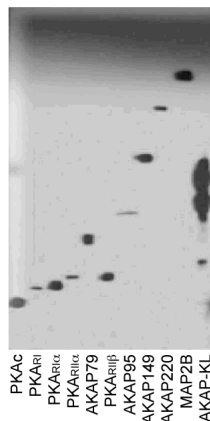
Dilutions are recommended based on western blotting on the indicated positive control.

This kit includes 10 µg of each antibody listed at a concentration of 250 µg/ml. No substitutions allowed.

## Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.



Western blot analysis of the sampler kit antibodies with each antibody tested on an appropriate positive control lysate (see table).

## BD Biosciences

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## Application Notes

### Application

Western blot

Routinely Tested

### Recommended Assay Procedure:

**Western blot:** Please refer to [http://www.bdbiosciences.com/support/resources/cell\\_biology/index.jsp](http://www.bdbiosciences.com/support/resources/cell_biology/index.jsp)

### Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.