Technical Data Sheet Purified Mouse Anti-PKA[C]

Product Information

Material Number:	610980
Size:	50 µg
Concentration:	250 μg/ml
Clone:	5B
Immunogen:	Human PKA[Cα] subunit aa. 18-347
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse
Target MW:	40 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

azide.

Description

cAMP-dependent **P**rotein Kinase (PKA) is composed of two distinct subunits: catalytic (**C**) and regulatory (R). Four regulatory subunits have been identified: RI α , RI β , RII α , and RII β . 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 α , C β , or C γ). Type II PKA can be distinguished by autophosphorylation of the R-subunits, while type I PKA binds Mg/ATP with high affinity. The levels of expression of the different subunits vary according to cell and tissue type.





Western blot analysis of PKA[C] on HeLa cell lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of antiPKA[C]. Immunofluorescent staining of HeLa cells.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application					
	Western blot	Routinely Tested			
	Immunofluorescence	Tested During Development			

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

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 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.

References

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Taylor SS, Buechler JA, Yonemoto W. cAMP-dependent protein kinase: framework for a diverse family of regulatory enzymes. Annu Rev Biochem. 1990; 59:971-1005. (Biology)

Westphal RS, Soderling SH, Alto NM, Langeberg LK, Scott JD. Scar/WAVE-1, a Wiskott-Aldrich syndrome protein, assembles an actin-associated multi-kinase scaffold. *EMBO J.* 2000; 19(17):4589-4600. (Clone-specific: Western blot)