

Technical Data Sheet

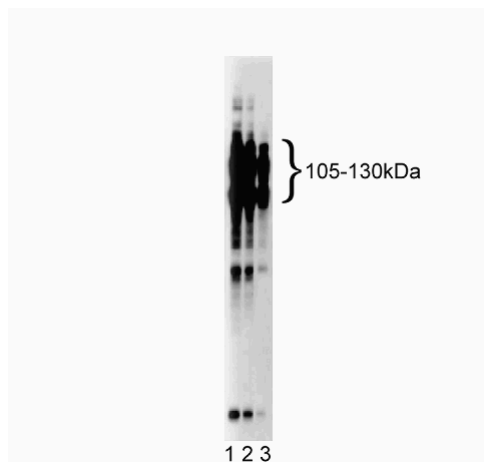
Purified Mouse Anti-AKAP-KL

Product Information

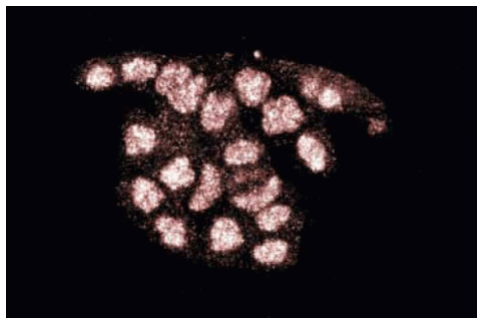
Material Number:	611134
Size:	50 µg
Concentration:	250 µg/ml
Clone:	41/AKAP-KL
Immunogen:	Mouse AKAP-KL aa. 627-746
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Rat
Target MW:	105-130 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Cyclic AMP (cAMP) is a common second messenger for a variety of cytokines, hormones, and neurotransmitters. Central to this signaling pathway is the activation of cAMP-dependent protein kinase A (PKA). The non-uniform intracellular distribution of PKA isoforms allows for the delivery of cAMP-transmitted signals to discrete subcellular sites. This is mediated by the attachment of PKA isoforms to the cytoskeleton or organelles by AKAPs. AKAPs simultaneously bind to the RII subunits of PKAII and to the cytoskeleton. At least six AKAP-KL (A kinase anchor proteins expressed in lung and kidney) proteins are generated by alternative mRNA splicing. They are present primarily in lung, kidney, and cerebellum and are absent from many other tissues. All isoforms consists of a 20-residue RII interaction domain. Additionally, AKAP-KL binds and regulates the actin cytoskeleton and exhibits a polarized distribution *in situ*. Thus, AKAP-KL plays a role in establishing polarity in signaling systems and also functions to focus and amplify cAMP-mediated signals by integrating PKA isoforms with downstream effector molecules.



Western blot analysis of AKAP-KL on mouse kidney lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of AKAP-KL.



Immunofluorescence staining of A431 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

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal
611457	Mouse Kidney Lysate	500 µg	(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 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

Dong F, Feldmesser M, Casadevall A, Rubin CS. Molecular characterization of a cDNA that encodes six isoforms of a novel murine A kinase anchor protein. *J Biol Chem.* 1998; 273(11):6533-6541.(Biology)