# Technical Data Sheet Purified Mouse Anti-AKAP220

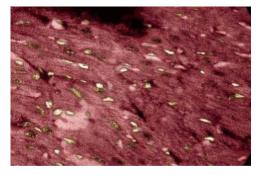
Product Information
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Material Number:	610704
Size:	50 µg
Concentration:	250 µg/ml
Clone:	13/AKAP220
Immunogen:	Rat AKAP220 aa.11-173
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat
Target MW:	220 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.

#### Description

The type II cAMP-dependent Protein Kinase (PKA) is compartmentalized within the cell. To maintain this localization of type II PKAs, the regulatory subunit (RII) interacts with RII-anchoring proteins. For instance, attachment of type II PKA to the cytoskeleton occurs through the binding of RII to microtubule associated-protein 2. In brain, several proteins have been identified as PKA type II anchoring proteins and form a family named AKAP (A-Kinase Anchor Proteins). AKAP220 is a protein of 1129 amino acids with a PKARII binding site and a CRL motif at the COOH terminus, characteristic of peroxisomal proteins. AKAP20 mRNA is expressed ubiquitously with the highest levels in testis and brain. Immunolocalization studies confirmed the peroxisomal distribution of both AKAP220 and PKARII in a cell line derived from rat Sertoli cells.





Western blot analysis of AKAP220 on rat brain lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:2000 dilution of anti-AKAP220.

Immunofluroescent staining of Rabbit Heart with anti-AKAP220.

#### **Preparation and Storage**

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

## Application Notes

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Western blot	Routinely Tested			
Immunofluorescence	Tested During Development			
Immunohistochemistry	Tested During Development			
Immunoprecipitation	Not Recommended			

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### **Suggested Companion Products**

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 4. 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.

#### References

Dell'Acqua ML, Scott JD. Protein kinase A anchoring. J Biol Chem. 1997; 272(20):12881-12884.(Biology)

Lester LB, Coghlan VM, Nauert B, Scott JD. Cloning and characterization of a novel A-kinase anchoring protein. AKAP 220, association with testicular peroxisomes.. J Biol Chem. 1996; 271(16):9460-9465. (Biology)

Tanji C, Yamamoto H, Yorioka N, Kohno N, Kikuchi K, Kikuchi A. A-kinase anchoring protein AKAP220 binds to glycogen synthase kinase-3beta (GSK-3beta) and mediates protein kinase A-dependent inhibition of GSK-3beta. J Biol Chem. 2002; 277(40):36955-36961.(Clone-specific: Immunoprecipitation, Western blot)