Datasheet for ABIN968571

anti-AKAP9 antibody (AA 17-130)

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Overview

Quantity:	50 µg
Target:	AKAP9
Binding Specificity:	AA 17-130
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKAP9 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human AKAP450 aa. 17-130
Clone:	7-AKAP450
Isotype:	IgG1
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us 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.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	AKAP9
Alternative Name:	AKAP450 (AKAP9 Products)
Background:	Compartmentalization of the type II cAMP-dependent protein kinase (PKA) within the cell is essential for its discrete physiological effects. PKA localization is mediated by interactions between the regulatory (RII) subunit and A-kinase anchoring proteins (AKAPs) which position PKA in close proximity to relevant substrates. Some AKAPs exhibit tissue specific expression, while others are detected ubiquitously. AKAP450 localizes PKA type II to centrosomes. The N-terminal portion of AKAP450 (amino acids 1-1626) is almost identical to the Yotiao protein (~210 kDa), an AKAP that localizes PKA to NMDA receptors. In addition, AKAP450 contains three major regions (cc1, cc2, cc3) of coiled coil structures, which are characteristic features of centrosomeal proteins. It is expressed at low levels in multiple tissues, including skeletal muscle and liver, but is highly expressed in kidney. PKA is thought to be involved in the maintenance of the interphase microtubule network and to be necessary for stabilization of minus-end microtubules that originate from the centrosome. Thus AKAP450 may serve as a scaffolding protein to localize PKA and other signaling molecules together in cetrosomes. This antibody is routinely tested by western blot analysis.
Molecular Weight:	450 kDa
Pathways:	M Phase, SARS-CoV-2 Protein Interactome

Application Details

Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20°C.

Publications

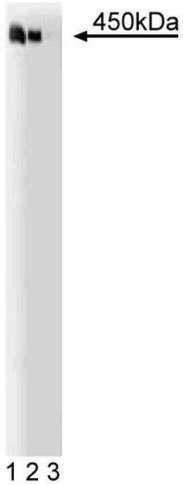
Product cited in:

Westphal, Tavalin, Lin, Alto, Fraser, Langeberg, Sheng, Scott: "Regulation of NMDA receptors by an associated phosphatase-kinase signaling complex." in: **Science (New York, N.Y.)**, Vol. 285, Issue 5424, pp. 93-6, (1999) (PubMed).

Witczak, Skålhegg, Keryer, Bornens, Taskén, Jahnsen, Orstavik: "Cloning and characterization of a cDNA encoding an A-kinase anchoring protein located in the centrosome, AKAP450." in: **The EMBO journal**, Vol. 18, Issue 7, pp. 1858-68, (1999) (PubMed).

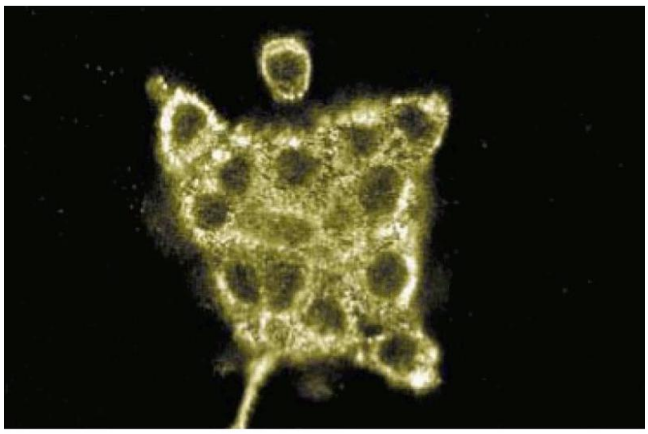
Lin, Wyszynski, Madhavan, Sealock, Kim, Sheng: "Yotiao, a novel protein of neuromuscular junction and brain that interacts with specific splice variants of NMDA receptor subunit NR1." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 18, Issue 6, pp. 2017-27, (1998) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of AKAP450 on a Jurkat cell lysate (human T-cell leukemia, ATCC TIB-152). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti-human AKAP450 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of A431 cells (human epithelial carcinoma, ATCC CRL-1555).

Image 3.