abcam

Product datasheet

Anti-AKAP9 antibody [17G10] ab32679

1 References 4 Images

Overview

Product name	Anti-AKAP9 antibody [17G10]
Description	Mouse monoclonal [17G10] to AKAP9
Host species	Mouse
Tested applications	**Suitable for:** IHC-P, ICC
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Dog, Chimpanzee
Immunogen	Synthetic peptide: QFRQRKAQSDGQSPS , corresponding to amino acids 31-45 of Human AKAP9 Run BLAST with Run BLAST with
Positive control	ICC: A431, HeLa and NIH-3T3 cells. IHC-P: Human pancreas tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	17G10
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32679 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/10 - 1/100.
ICC		Use a concentration of 4 µg/ml.

Target

Function Binds to type II regulatory subunits of protein kinase A. Scaffolding protein that assembles several protein kinases and phosphatases on the centrosome and Golgi apparatus. May be required to maintain the integrity of the Golgi apparatus. Isoform 4 is associated with the N-methyl-D-aspartate receptor and is specifically found in the neuromuscular junction (NMJ) as well as in neuronal synapses, suggesting a role in the organization of postsynaptic specializations.

Tissue specificity Widely expressed. Isoform 4 is highly expressed in skeletal muscle and in pancreas.

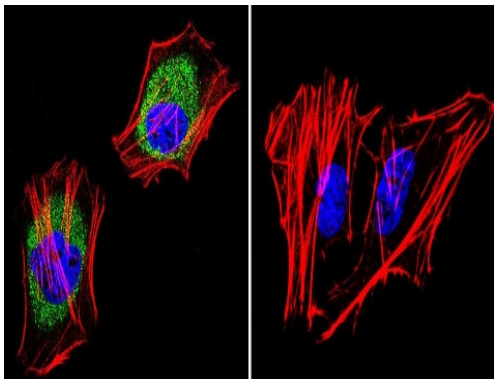
Involvement in disease Defects in AKAP9 are the cause of long QT syndrome type 11 (LQT11) [MIM:611820]. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to excercise or emotional stress. They can present with a sentinel event of sudden cardiac death in infancy.

Domain RII-binding site, predicted to form an amphipathic helix, could participate in protein-protein interactions with a complementary surface on the R-subunit dimer.

Post-translational modifications Phosphorylated upon DNA damage, probably by ATM or ATR.

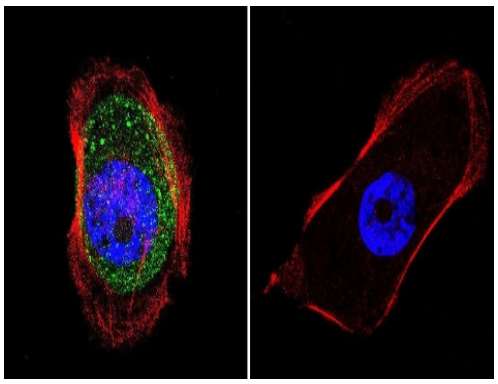
Cellular localization Cytoplasm. Cytoplasm > cytoskeleton > centrosome. Golgi apparatus. Cytoplasmic in parietal cells.

Images



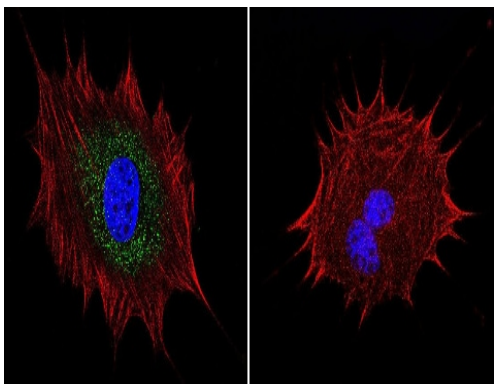
Immunocytochemistry - Anti-AKAP9 antibody [17G10] (ab32679)

Immunocytochemical analysis of AKAP9 in HeLa cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a AKAP9 monoclonal antibody (ab32679) at a dilution of 1:20 overnight at 4 C and incubated with a DyLight-488 conjugated secondary antibody. AKAP9 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



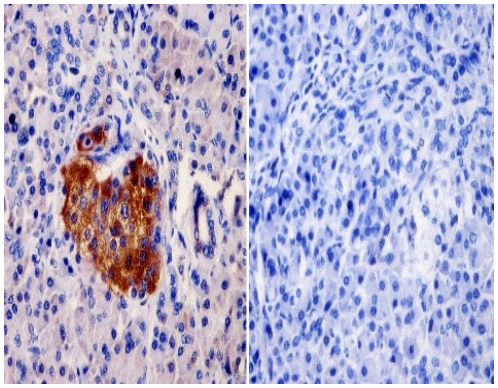
Immunocytochemistry - Anti-AKAP9 antibody [17G10] (ab32679)

Immunocytochemical analysis of AKAP9 in A431 cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a AKAP9 monoclonal antibody (ab32679) at a dilution of 1:100 overnight at 4 C and incubated with a DyLight-488 conjugated secondary antibody. AKAP9 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



Immunocytochemistry - Anti-AKAP9 antibody [17G10] (ab32679)

Immunocytochemical analysis of AKAP9 in NIH-3T3 cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a AKAP9 monoclonal antibody (ab32679) at a dilution of 1:100 overnight at 4 C and incubated with a DyLight-488 conjugated secondary antibody. AKAP9 staining (green) F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKAP9 antibody [17G10] (ab32679)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human pancreas tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer and microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature and probed with a AKAP9 monoclonal antibody (ab32679) at a dilution of 1:20 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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