Product name:	AKAP9 Rabbit Polyclonal Antibody
Cat number:	ABN06730
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human protein . at AA range: 2610-2690
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:50-1:300,ICC/IF 1:50-1:200
Molecular Weight:	430kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. Alternate splicing of this gene results in at least two isoforms that localize to the centrosome and the Golgi apparatus, and interact with numerous signaling proteins from multiple signal transduction pathways. These signaling proteins include type II protein kinase A, serine/threonine kinase protein kinase N, protein phosphatase 1, protein phosphatase 2a, protein kinase C-epsilon and phosphodiesterase 4D3. [provided by RefSeq, Aug 2008],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.,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/Yotiao 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.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily.,subcellular location:Cytoplasmic in parietal cells.,subunit:Interacts with the regulatory region of protein kinase N (PKN), protein phosphatase 2A (PP2A), protein phosphatase 1 (PP1) and the immature non-phosphorylated form of PKC epsilon. Interacts with CIP4 and FNBP1.,tissue specificity:Widely expressed. Isoform 4/Yotiao is highly expressed in skeletal muscle and in pancreas.,