



AKAP 79 Polyclonal Antibody

Catalog No	YP-Ab-03694
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	AKAP5
Protein Name	A-kinase anchor protein 5
Immunogen	The antiserum was produced against synthesized peptide derived from human AKAP5. AA range:1-50
Specificity	AKAP 79 Polyclonal Antibody detects endogenous levels of AKAP 79 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AKAP5; AKAP79; A-kinase anchor protein 5; AKAP-5; A-kinase anchor protein 79 kDa; AKAP 79; H21; cAMP-dependent protein kinase regulatory subunit II high affinity-binding protein
Observed Band	47kD
Cell Pathway	Postsynaptic recycling endosome membrane ; Lipid-anchor . Associates with lipid rafts. .
Tissue Specificity	Predominantly in the cerebral cortex and the postsynaptic densities of the forebrain, and to a lesser extent in adrenal medulla, lung and anterior pituitary.
Function	domain:RII-alpha binding site, predicted to form an amphipathic helix, could participate in protein-protein interactions with a complementary surface on the R-subunit dimer.;function:May anchor the PKA protein to cytoskeletal and/or organelle-associated proteins, targeting the signal carried by cAMP to specific intracellular effectors. Association with to the beta2-adrenergic receptor (beta2-AR) not only regulates beta2-AR signaling pathway, but also the activation by PKA by switching off the beta2-AR signaling cascade.;miscellaneous:The N-terminal region, which is highly basic, is required for interaction with calmodulin.;similarity:Contains 1 AKAP domain.;subcellular location:Associated with particulate fractions.;subunit:Binding protein for dimer of the RII-beta regulatory subunit of cAMP-dependent protein kinase (PKA) and also for the



protein kinase C (PKC) and the phosphatase calcin

Background

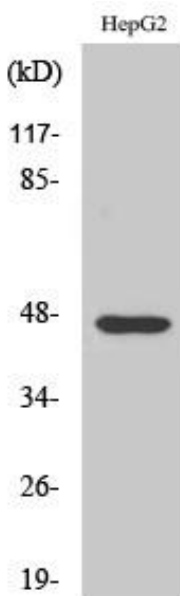
The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein binds to the RII-beta regulatory subunit of PKA, and also to protein kinase C and the phosphatase calcineurin. It is predominantly expressed in cerebral cortex and may anchor the PKA protein at postsynaptic densities (PSD) and be involved in the regulation of postsynaptic events. It is also expressed in T lymphocytes and may function to inhibit interleukin-2 transcription by disrupting calcineurin-dependent dephosphorylation of NFAT. [provided by RefSeq, Jul 2008],

matters needing attention

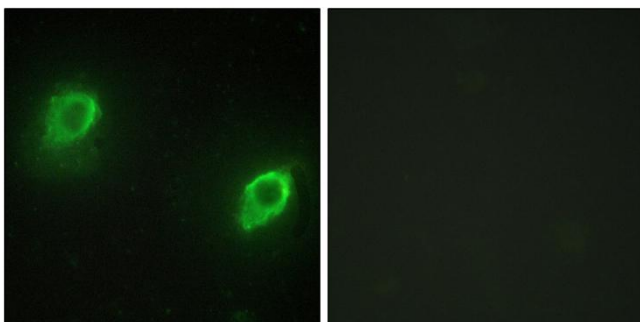
Avoid repeated freezing and thawing!

Usage suggestions

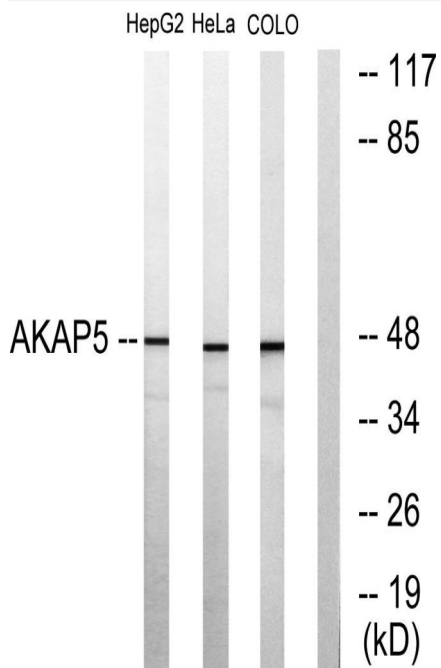
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

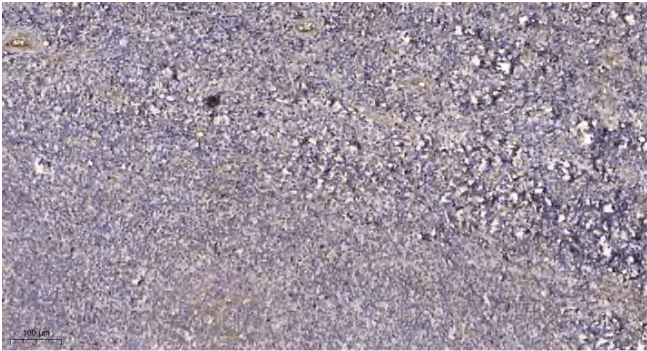
Western Blot analysis of various cells using AKAP 79 Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HeLa cells, using AKAP5 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2, HeLa, and COLO205 cells, using AKAP5 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).