



# AKAP 79 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-03694                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Reactivity</b>                  | Human;Rat;Mouse;                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene Name</b>                   | AKAP5                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human AKAP5. AA range:1-50                                                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>                 | AKAP 79 Polyclonal Antibody detects endogenous levels of AKAP 79 protein.                                                                                                                                                                                                                                                                                                                                                |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                    |
| <b>Dilution</b>                    | 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.                                                                                                                                                                                                                                                             |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>                    | A kinase (PRKA) anchor protein 5;A kinase anchor protein 5;A kinase anchor protein 79kDa;A kinase anchoring protein 75/79;A-kinase anchor protein 5;A-kinase anchor protein 79 kDa;AKAP 5;AKAP 75;AKAP 79;AKAP-5;Akap5;AKAP5_HUMAN;AKAP75;AKAP79;cAMP dependent protein kinase regulatory subunit II high affinity binding protein;cAMP-dependent protein kinase regulatory subunit II high affinity-binding protein;H21 |
| <b>Observed Band</b>               | 47kD                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated Molecular Weight</b> | 47kD                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cell Pathway</b>                | Postsynaptic recycling endosome membrane ; Lipid-anchor . Associates with lipid rafts. .                                                                                                                                                                                                                                                                                                                                 |
| <b>Tissue Specificity</b>          | Predominantly in the cerebral cortex and the postsynaptic densities of the forebrain, and to a lesser extent in adrenal medulla, lung and anterior pituitary.                                                                                                                                                                                                                                                            |
| <b>Function</b>                    | 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**

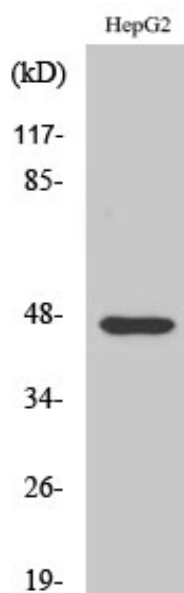
Avoid repeated freezing and thawing!

**Usage suggestions**

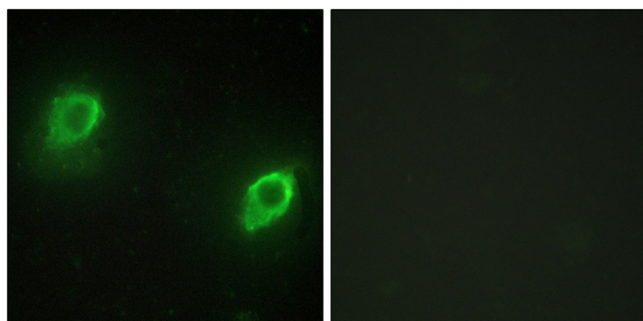
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



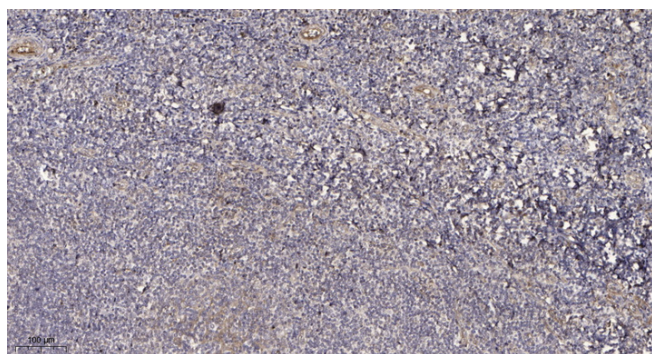
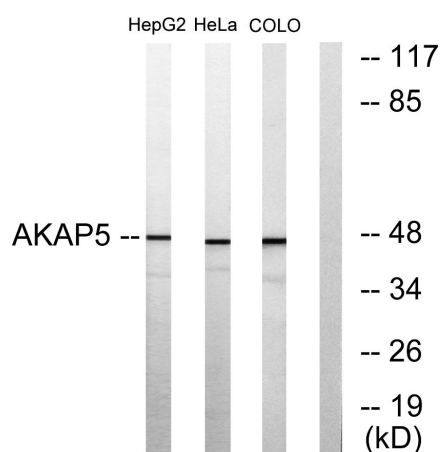
Western Blot analysis of various cells using AKAP 79  
Polyclonal Antibody diluted at 1:1000



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).