

AKAP5 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19171c**Specification**

AKAP5 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P24588
Other Accession	NP_004848.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	47088
Antigen Region	115-143

AKAP5 Antibody (Center) - Additional Information**Gene ID** 9495**Other Names**

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, AKAP5, AKAP79

Target/Specificity

This AKAP5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 115-143 amino acids from the Central region of human AKAP5.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AKAP5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AKAP5 Antibody (Center) - Protein Information**Name** AKAP5**Synonyms** AKAP79

Function Multivalent scaffold protein that anchors the cAMP-dependent protein kinase/PKA to cytoskeletal and/or organelle-associated proteins, targeting the signal carried by cAMP to specific intracellular effectors (PubMed:[1512224](#)). Association with 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. Plays a role in long term synaptic potentiation by regulating protein trafficking from the dendritic recycling endosomes to the plasma membrane and controlling both structural and functional plasticity at excitatory synapses (PubMed:[25589740](#)).

Cellular Location

Postsynaptic recycling endosome membrane; Lipid- anchor. Note=Associates with lipid rafts

Tissue Location

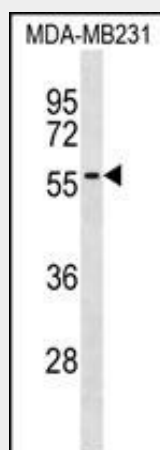
Predominantly in the cerebral cortex and the postsynaptic densities of the forebrain, and to a lesser extent in adrenal medulla, lung and anterior pituitary

AKAP5 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

AKAP5 Antibody (Center) - Images



AKAP5 Antibody (Center) (Cat. #AP19171c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the AKAP5 antibody detected the AKAP5 protein (arrow).

AKAP5 Antibody (Center) - 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.

AKAP5 Antibody (Center) - References

Willoughby, D., et al. J. Biol. Chem. 285(26):20328-20342(2010)
Chen, M.H., et al. Cell. Signal. 21(1):136-142(2009)
Tavalin, S.J. J. Biol. Chem. 283(17):11445-11452(2008)
Correia, S.S., et al. Nat. Neurosci. 11(4):457-466(2008)
Chai, S., et al. J. Biol. Chem. 282(31):22668-22677(2007)