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Goat Anti-AKAP10 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1042a

Specification

Goat Anti-AKAP10 Antibody - Product Information

Application	**WB, E**
Primary Accession	O43572
Other Accession	NP_009133, 11216, 56697 (mouse), 360540 (rat)
Reactivity	**Rat**
Predicted	**Human, Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**73818**

Goat Anti-AKAP10 Antibody - Additional Information

Gene ID 11216

Other Names
A-kinase anchor protein 10, mitochondrial, AKAP-10, Dual specificity A kinase-anchoring protein 2, D-AKAP-2, Protein kinase A-anchoring protein 10, PRKA10, AKAP10

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-AKAP10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AKAP10 Antibody - Protein Information

Name AKAP10

Function

Differentially targeted protein that binds to type I and II regulatory subunits of protein kinase A and anchors them to the mitochondria or the plasma membrane. Although the physiological relevance between PKA and AKAPS with mitochondria is not fully understood, one idea is that BAD, a proapoptotic member, is phosphorylated and inactivated by mitochondria-anchored PKA. It cannot be excluded too that it may facilitate PKA as well as G protein signal transduction, by acting as an adapter for assembling multiprotein complexes. With its RGS domain, it could lead to the interaction to G- alpha proteins, providing a link between the signaling machinery and the downstream kinase (By similarity).

Cellular Location
Mitochondrion. Membrane. Cytoplasm. Note=Predominantly mitochondrial but also membrane associated and cytoplasmic

Goat Anti-AKAP10 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-AKAP10 Antibody - Images

AF1042a (1 µg/ml) staining of Rat Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-AKAP10 Antibody - 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 interacts with both the type I and type II regulatory subunits of PKA; therefore, it is a dual-specific AKAP. This protein is highly enriched in mitochondria. It contains RGS (regulator of G protein signalling) domains, in addition to a PKA-RII subunit-binding domain. The mitochondrial localization and the presence of RGS domains may have important implications for the function of this protein in PKA and G protein signal transduction.

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Association of genetic variants with chronic kidney disease in individuals with different lipid profiles. Yoshida T, et al. Int J Mol Med, 2009 Aug. PMID 19578796.