

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

Goat Anti-AKAP10 Antibody - Product Information

Application	WB
Primary Accession	O43572
Other Accession	NP_009133 , 11216 , 56697 (mouse) , 360540 (rat)
Reactivity	Rat
Predicted	Human, Mouse, Dog, Cow
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

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 Cytometry](#)
- [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.

Goat Anti-AKAP10 Antibody - References

A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al.

Carcinogenesis, 2010 Jul. PMID 20453000.

Structure of D-AKAP2:PKA RI complex: insights into AKAP specificity and selectivity. Sarma GN, et al. Structure, 2010 Feb 10. PMID 20159461.

Association of the A1936G (rs203462) of A-kinase anchoring protein 10 polymorphisms with QT interval prolongation during kidney transplantation. Zukowski M, et al. Transplant Proc, 2009 Oct. PMID 19857670.

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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.