

Goat Anti-AKAP3 / SOB1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1043a**Specification**

Goat Anti-AKAP3 / SOB1 Antibody - Product Information

Application	WB, E
Primary Accession	O75969
Other Accession	NP_006413 , 10566
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	94751

Goat Anti-AKAP3 / SOB1 Antibody - Additional Information**Gene ID** 10566**Other Names**

A-kinase anchor protein 3, AKAP-3, A-kinase anchor protein 110 kDa, AKAP 110, Cancer/testis antigen 82, CT82, Fibrous sheath protein of 95 kDa, FSP95, Fibrousheathin I, Fibrousheathin-1, Protein kinase A-anchoring protein 3, PRKA3, Sperm oocyte-binding protein, AKAP3, AKAP110, SOB1

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-AKAP3 / SOB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AKAP3 / SOB1 Antibody - Protein Information**Name** AKAP3 {ECO:0000303|PubMed:35228300, ECO:0000312|HGNC:HGNC:373}

Function

Structural component of sperm fibrous sheath (By similarity). Required for the formation of the subcellular structure of the sperm flagellum, sperm motility and male fertility (PubMed:35228300).

Cellular Location

Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:O88987}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:O88987}. Note=Dorsal margin of the acrosomal segment. Ribs of the fibrous sheath in the principal piece of the sperm tail. {ECO:0000250|UniProtKB:O88987}

Tissue Location

Testis specific; only expressed in spermatids.

Goat Anti-AKAP3 / SOB1 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-AKAP3 / SOB1 Antibody - Images

AF1043a (1 µg/ml) staining of Human Testis lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-AKAP3 / SOB1 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, and is expressed in testis only. The encoded protein contains an RII-binding domain, and is predicted to participate in protein-protein interactions with the R-subunit of the PKA. This protein is localized to the ribs of the fibrous sheath in the principal piece of the sperm tail. It may function as a regulator of both motility- and head-associated functions such as capacitation and the acrosome

reaction.

Goat Anti-AKAP3 / SOB1 Antibody - References

Human spermatozoa contain multiple targets for protein S-nitrosylation: an alternative mechanism of the modulation of sperm function by nitric oxide? Lefièvre L, et al. Proteomics, 2007 Sep. PMID 17683036.

A-kinase anchoring protein 3 messenger RNA expression correlates with poor prognosis in epithelial ovarian cancer. Sharma S, et al. Gynecol Oncol, 2005 Oct. PMID 16005946.

Association of sperm protein 17 with A-kinase anchoring protein 3 in flagella. Lea IA, et al. Reprod Biol Endocrinol, 2004 Jul 16. PMID 15257753.

A-kinase anchoring protein 3 messenger RNA expression in ovarian cancer and its implication on prognosis. Hasegawa K, et al. Int J Cancer, 2004 Jan 1. PMID 14618620.

A-kinase anchoring protein 4 binding proteins in the fibrous sheath of the sperm flagellum. Brown PR, et al. Biol Reprod, 2003 Jun. PMID 12606363.