10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPATA19 Antibody

Catalog # ASC11413

Product Information

Application	WB, E
Primary Accession	Q7Z5L4
Other Accession	EAW67810, 28376652
Reactivity	Human, Mouse, Rat
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	19186
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SPATA19 antibody can be used for detection of SPATA19 by Western blot at 1 - 2 □g/mL.

Additional Information

Gene ID	219938
Other Names	Spermatogenesis-associated protein 19, mitochondrial, Spermatogenic cell-specific gene 1 protein, Spergen-1, SPATA19, SPERGEN1
Target/Specificity	SPATA19; At least two isoforms of SPATA19 are known to exist; this antibody will detect both isoforms. SPATA19 antibody is predicted to not cross-react with other SPATA family members.
Reconstitution & Storage	SPATA19 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	SPATA19 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPATA19
Synonyms	SPERGEN1
Function	Essential for sperm motility and male fertility (By similarity). Plays an important role in sperm motility by regulating the organization and function of the mitochondria and is also required for correct sperm midpiece assembly (By similarity).
Cellular Location	Mitochondrion outer membrane {ECO:0000250|UniProtKB:Q9DAQ9}.

	Mitochondrion {ECO:0000250|UniProtKB:Q9DAQ9}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q9DAQ9}. Note=Localizes to the midpiece of the sperm flagellum. {ECO:0000250|UniProtKB:Q9DAQ9}
Tissue Location	Expressed specifically in testis.

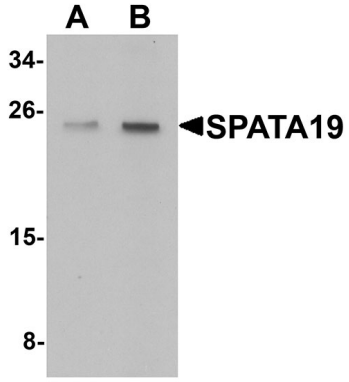
Background

SPATA19 Antibody: SPATA19, also known as SPERGEN1, was initially identified as a testis-specific protein that localizes to the surface of mitochondria in the middle piece of mature spermatozoa. Recent experiments have shown that elevated levels of SPATA19 have been found in basal cell carcinomas and prostate cancers, suggesting that SPATA19 may serve as a putative cancer biomarker and a target for cancer immunotherapy.

References

Miyamoto T, Sengoku K, Hasuike S, et al. Isolation and expression analysis of the human testis-specific gene, SPERGEN-1, a spermatogenic cell-specific gene-1. J. Assist. Reprod. Genet. 2003; 20:101-4.
Doiguchi M, Mori T, Toshimori K, et al. Spergen-1 might be an adhesive molecule associated with mitochondria in the middle piece of spermatozoa. Dev. Biol. 2002; 252:127-37.
Ghafouri-Fard S, Abbasi A, Moslehi H, et al. Elevated levels of testis-specific genes TEX101 and SPATA19 in basal cell carcinoma and their correlation with clinical and pathological features. Br. J. Dermatol. 2010; 162:772-9
Ghafouri-Fard S, Ousati Ashtiani Z, Sabah Golian B, et al. Expression of two testis-specific genes, SPATA19 and LEMD1, in prostate cancer. Arch. Med. Res. 2010; 41:195-200.

Images



Western blot analysis of SPATA19 in rat lung tissue lysate with SPATA19 antibody at (A) 1 and (B) 2 µg/mL.