

SPATA1 Antibody

Catalog # ASC11393

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q5VX52
Other Accession	Q5VX52 , 341915102
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	52946
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SPATA1 antibody can be used for detection of SPATA1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	100505741
Other Names	Spermatogenesis-associated protein 1, Sperm-specific protein SP-2, SPATA1
Target/Specificity	SPATA1; At least two isoforms of SPATA1 are known to exist; this antibody will detect only the longest isoforms. SPATA1 antibody is predicted to not cross-react with other SPATA family members.
Reconstitution & Storage	SPATA1 antibody can be stored at 4°C for three months and -20°C, 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	SPATA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPATA1
Cellular Location	Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250 UniProtKB:Q9D5R4}

Background

SPATA1 Antibody: SPATA1, a novel cell-surface protein, is involved in shaping the sperm head during

spermatogenesis. SPATA1 is localized at chromosome 1q21. At least three isoforms of SPATA1 are known to exist. The longest is preferentially expressed in hematopoietic tissues. Its extracellular domain contains a single immunoglobulin-like domain, and its intracellular segment has two immunoreceptor tyrosine-based inhibition motifs (ITIMs). It is thought to have an important role in hematopoietic cell signaling. The mid-sized isoform contains a short intracellular part without ITIMs, while the shortest isoform lacks the transmembrane segment and represents a potential soluble protein (2, 3).

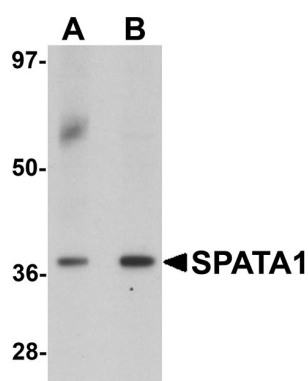
References

Giesecke K, Hamann H, Stock KF, et al. Evaluation of SPATA1-associated markers for stallion fertility. *Anim. Genet.* 2009; 40:359-65.

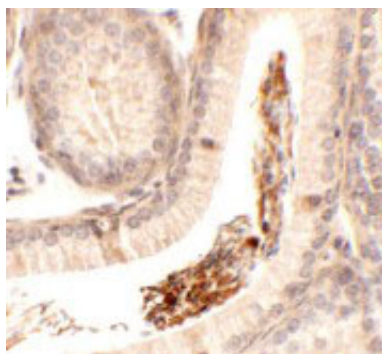
Xu MJ, Zhao R, Zhao ZJ. Molecular cloning and characterization of SPAP1, an inhibitory receptor. *Biochem. Biophys. Res. Commun.* 2001; 280:768-75

Liu SF, He S, Liu BW, et al. Cloning and characterization of testis-specific spermatogenesis associated gene homologous to human SPATA4 in rat. *Biol. Pharm. Bull.* 2004; 27:1867-70.

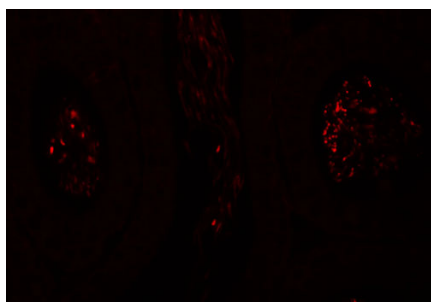
Images



Western blot analysis of SPATA1 in A20 cell lysate with SPATA1 antibody at (A) 1 and (B) 2 $\mu\text{g/mL}$.



Immunohistochemistry of SPATA1 in mouse testis tissue with SPATA1 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of SPATA1 in mouse testis tissue with SPATA1 antibody at 20 $\mu\text{g/mL}$.