

SPINK2 Antibody

Catalog # ASC11432

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P20155
Other Accession	NP_065804 , 10863911
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	9291
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SPINK2 antibody can be used for detection of SPINK2 by Western blot at 1 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	6691
Other Names	Serine protease inhibitor Kazal-type 2, Acrosin-trypsin inhibitor, Epididymis tissue protein Li 172, HUSI-II, SPINK2
Target/Specificity	SPINK2; SPINK2 antibody is predicted to not cross-react with other SPINK family members.
Reconstitution & Storage	SPINK2 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	SPINK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPINK2
Function	As a strong inhibitor of acrosin, it is required for normal spermiogenesis. It probably hinders premature activation of proacrosin and other proteases, thus preventing the cascade of events leading to spermiogenesis defects (PubMed: 28554943). May be involved in the regulation of serine protease-dependent germ cell apoptosis (By similarity). It also inhibits trypsin.
Cellular Location	Secreted. Cytoplasmic vesicle, secretory vesicle, acrosome

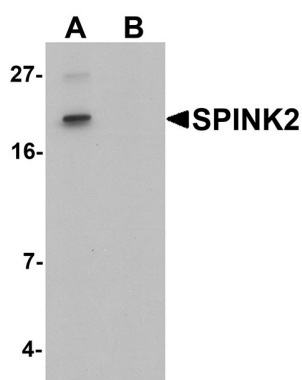
Background

SPINK2 Antibody: Human serine proteinase inhibitor Kazal-type 2 (SPINK2) is required for maintaining normal spermatogenesis and potentially regulates serine protease-mediated apoptosis in male germ cells. It contains a typical kazal domain composed by six cysteine residues forming three disulfide bridges. SPINK2 functions as a trypsin/acrosin inhibitor and is synthesized mainly in the testis and seminal vesicle where its activity is engaged in fertility. SPINK2 plays a role in the pathogenesis of hereditary and chronic pancreatitis.

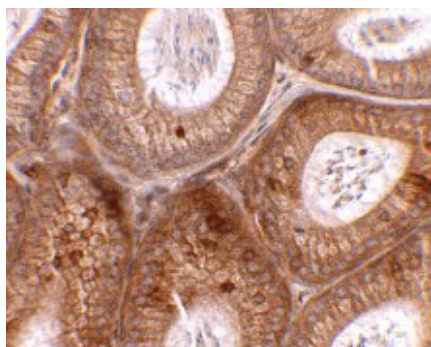
References

Lee B, Park I, Jin S, et al. Impaired spermatogenesis and fertility in mice carrying a mutation in the Spink2 gene expressed predominantly in testes. *J. Biol. Chem.* 2011; 286:29108-17
Chen T, Lee TR, Liang WG, et al. Identification of trypsin-inhibitory site and structure determination of human SPINK2 serine proteinase inhibitor. *Proteins* 2009; 77:209-19.
Liddle RA. Pathophysiology of SPINK mutations in pancreatic development and disease. *Endocrinol. Metab. Clin. North Am.* 2006; 35:345-56.

Images

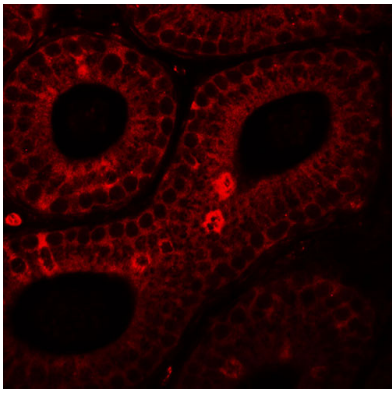


Western blot analysis of SPINK2 in mouse heart tissue lysate with SPINK2 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of SPINK2 in mouse testis tissue with SPINK2 antibody at 2.5 $\mu\text{g/mL}$.

Immunofluorescence of SPINK2 in mouse testis tissue with SPINK2 antibody at 20 $\mu\text{g/mL}$.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.