

## **SPINK2 Antibody**

Catalog # ASC11432

## **Specification**

## **SPINK2 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB, IHC, IF P20155

NP\_065804, 10863911

Human, Mouse

Rabbit Polyclonal

IgG

SPINK2 antibody can be used for detection

of SPINK2 by Western blot at 1 μg/mL.

Antibody can also be used for

immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

## **SPINK2 Antibody - Additional Information**

Gene ID **6691** 

**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.

## **SPINK2 Antibody - 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:<a href="http://www.uniprot.org/citations/28554943" target="\_blank">28554943</a>). 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

## **Tissue Location**



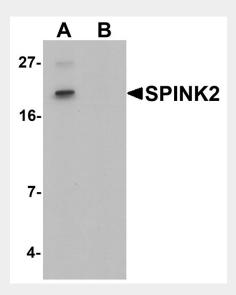
Expressed in epididymis (at protein level).

# **SPINK2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **SPINK2 Antibody - Images**

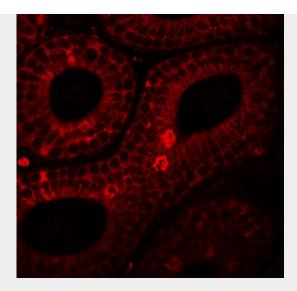


Western blot analysis of SPINK2 in mouse heart tissue lysate with SPINK2 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of SPINK2 in mouse testis tissue with SPINK2 antibody at 2.5 μg/mL.





Immunofluorescence of SPINK2 in mouse testis tissue with SPINK2 antibody at 20 μg/mL.

## SPINK2 Antibody - 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.

## **SPINK2 Antibody - 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.