

**SPESP1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP56777**

**Specification**

**SPESP1 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q6UW49</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPESP1
Epitope Specificity	151-250/350
Isotype	IgG
<b>Purity</b>	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic vesicle > secretory vesicle > acrosome. Small proacrosomal granules (during the Golgi phase), enlarged acrosomal vesicles (during the cap phase), acrosome (during the elongating phase), equatorial segment of the acrosome. Belongs to the SPESP1 family.
SIMILARITY	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Important Note	

**Background Descriptions**

SPESP1 is a 399 amino acid protein belonging to the SPESP1 family. Localizing to cytoplasmic vesicle, secretory vesicle, and acrosome, SPESP1 is highly expressed in testis, with lower levels found in placenta and fetal lung. SPESP1 establishes an equatorial segment subcompartment early in sperm development and is required for proper sperm-egg fusion. Disruption of SPESP1 leads to abnormal distribution of sperm proteins resulting in a detached membrane from the equatorial segment and less fertile sperm. SPESP1 may interact with IZUMO1 and MN9 antigen and contains an N-glycosylation site as well as several cAMP-dependent kinase, protein kinase C, and casein kinase II consensus phosphorylation sites.

**SPESP1 Polyclonal Antibody - Additional Information**

**Gene ID** 246777

**Other Names**

Sperm equatorial segment protein 1 {ECO:0000312|HGNC:HGNC:15570}, SP-ESP, Equatorial segment protein, ESP, Glycosylated 38 kDa sperm protein C-7/8, SPESP1 (<a

[HGNC:15570](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=15570)

### Target/Specificity

Highly expressed in testis, where it is localized in the acrosome of postmeiotic stages of spermiogenesis (round and elongating spermatids and in ejaculated spermatozoa) (at protein level). Poorly expressed in placenta and fetal lung.

### Dilution

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br /><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br /><span class ="dilution\_IF">IF~~1:50~200</span><br /><span class ="dilution\_ICC">ICC~~N/A</span><br /><span class ="dilution\_E">E~~N/A</span>

### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## SPESP1 Polyclonal Antibody - Protein Information

Name SPESP1 ([HGNC:15570](#))

### Function

Involved in fertilization ability of sperm.

### Cellular Location

Cytoplasmic vesicle, secretory vesicle, acrosome. Note=Small proacrosomal granules (during the Golgi phase), enlarged acrosomal vesicles (during the cap phase), acrosome (during the elongating phase), equatorial segment of the acrosome (during the maturation phase) (PubMed:12773409). After acrosome reaction localizes to the equatorial segment region in both noncapacitated and capacitated, acrosome-reacted sperm (By similarity) {ECO:0000250|UniProtKB:Q9D5A0, ECO:0000269|PubMed:12773409}

### Tissue Location

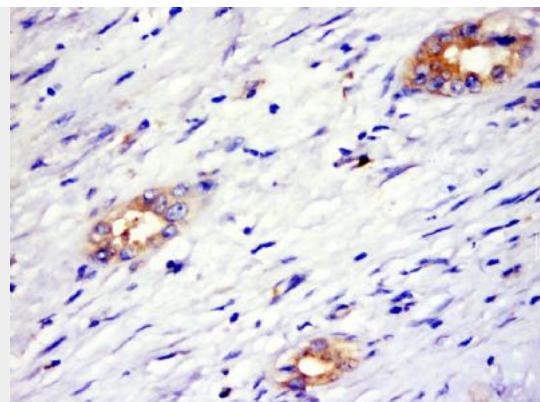
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## SPESP1 Polyclonal Antibody - Protocols

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](#)

## SPESP1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (human liver cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SPESP1) Polyclonal Antibody, Unconjugated (bs-17655R) at 1:800 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.