

SPESP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56777

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6UW49
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38931
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPESP1
Epitope Specificity	151-250/350
Isotype	IgG
Purity	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.
SIMILARITY	Belongs to the SPESP1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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.

Additional Information

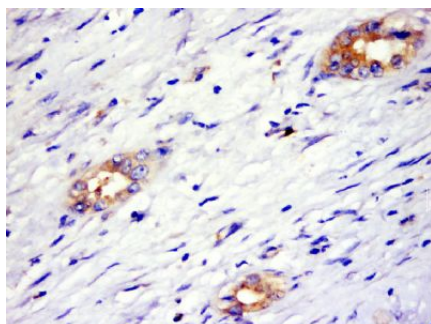
Gene ID	246777
Other Names	Sperm equatorial segment protein 1 {ECO:0000312 HGNC:HGNC:15570}, SP-ESP, Equatorial segment protein, ESP, Glycosylated 38 kDa sperm protein C-7/8, SPESP1 (HGNC:15570)
Target/Specificity	Highly expressed in testis, where it is localized in the acrosome of postmeiotic stages of spermiogenesis (round and elongating spermatids and in ejaculated spermatozoa) (at protein level). Poorly expressed in placenta and fetal lung.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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.

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	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

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 (AP56777) at 1:800 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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