

## Anti-SPESP1 antibody, rabbit serum

PROCEDURES. NOT FOR MILITARY USE.

Product code	73-065
Size	100 μl
Storage	Store 4°C for short term For long term storage store at -20°C.
	Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.1% sodium azide
Purity	Rabbit antiserum
Immunogen	Synthetic peptide corresponding to mouse SPESP1, MYGSNVFPEGRTSD (311-
	325 amino acids), conjugated with KLH
Isotype	Rabbit IgG
Reactivity	Mouse.
	Not tested with other species.
Special notes	Validation: KO mouse
Application	1. Western blotting (1/500~1/1,000 dilution)
	2. Immunofluorescence staining (1/100~1/500)
Background	The disruption of Spesp1 was shown to cause an aberrant distribution of various
	sperm proteins. SPESP1 is necessary to produce the fully 'fusion competent'
	sperm.
	Molecular mass: 44,702 with 399 amino acids. N-Glycosylated. N-terminal
	signal peptide (1-19) is removed in mature protein.
Data Link	UniProtKB Q9D5A0 Mouse SPESP1



Data Images: 73-065 Anti-SPESP1 antibody, rabbit serum

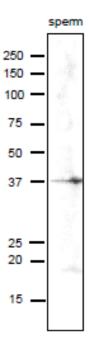


Fig. 1. Identification of SPESP1 protein in lysate of mouse sperm by western blotting with anti-SPESP1 antibody. Mouse sperm was lyzed in lysis buffer containing 1% Triton-X100 and extracts were prepared as supernatants of lysates after centrifugation. Proteins in the lysate were separated on SDS-PAGE (10~20% gradient gel) ,electro-blotted to PVDF membrane and reacted with anti-SPESP1 antibody at 1/1,000 dilution. As the second antibody, anti-rabbit IgG antibody conjugated with HRP (Abcam; ab97051) was used at 1/10,000

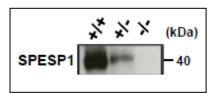


Fig.2 Dose dependent expression of SPESP1 protein in wild-type (+/+), heretoallelic (+/-) and knock-out (-/-) mouse sperm..

Primary antibody was used at 1/500 dilution and 2<sup>nd</sup> antibody was at 1/10,000.



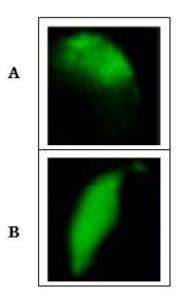


Fig.3. Immunofluorescence staining of mouse SPESP1 with anti-SPESP1 antibody.

- A. Round spermatid
- B. Epididymal sperm

As secondary antibody, Alexa Fluor 488 conjugated anti-rabbit IgG antibody was used.

Reference: This antibody was described and used in the following publication.

1. Fujihara Y. et al. (2010) Sperm equatorial segment protein 1, SPESP1, is required for fully fertile sperm in mouse. <u>J Cell Sci.</u> 123:1531-6. WB, IF. Free access.