

Supplementary

Table S1 Antibodies used in the study

Antigen	Source	Company	Application	Dilution	Label	RRID
ASB17	Rabbit	Aviva	IF	1:1,000	ES junction	AB_10713532
ESPN	Mouse	BD	IF; IP	1:200; 5 µg/IP	ES junction	AB_399174
Tubulin	Rabbit	Abcam	WB	1:10,000	Loading control	AB_2210403
His	Rabbit	Abcam	WB	1:1,000	Tag	AB_443105
Ubiquitin	Mouse	Santa Cruz	WB	1:1,000	Ubiquitin chain	AB_628423
PNA	–	Vector	IF	1:50	Acrosome	AB_2336642
Phalloidins	–	Thermo	IF	1:200	F-actin	AB_2632953

Asb17, ankyrin repeat and SOCS box protein 17; ESPN, Espin; PNA, Peanut agglutinin.

Table S2 Top10 binding residues

Class	Residue_ID	Binding free energy (kcal/mol) (total –48.85)
ESPN	HIE-304	–6.58
ESPN	TRP-272	–3.48
ESPN	THR-330	–2.53
ESPN	LEU-271	–2.12
ESPN	ASP-303	–1.65
ESPN	GLN-329	–1.20
ESPN	ASP-311	–1.06
ESPN	ARG-326	–1.05
ESPN	GLY-306	–0.79
ESPN	TYR-307	–0.64
ASB17	ARG-234	–4.02
ASB17	ARG-125	–3.44
ASB17	LEU-145	–3.38
ASB17	LEU-87	–2.31
ASB17	ARG-134	–2.23
ASB17	ASN-180	–2.11
ASB17	LEU-183	–2.10
ASB17	SER-146	–2.07
ASB17	GLY-147	–1.96
ASB17	LEU-152	–1.70

Asb17, ankyrin repeat and SOCS box protein 17; ESPN, Espin.

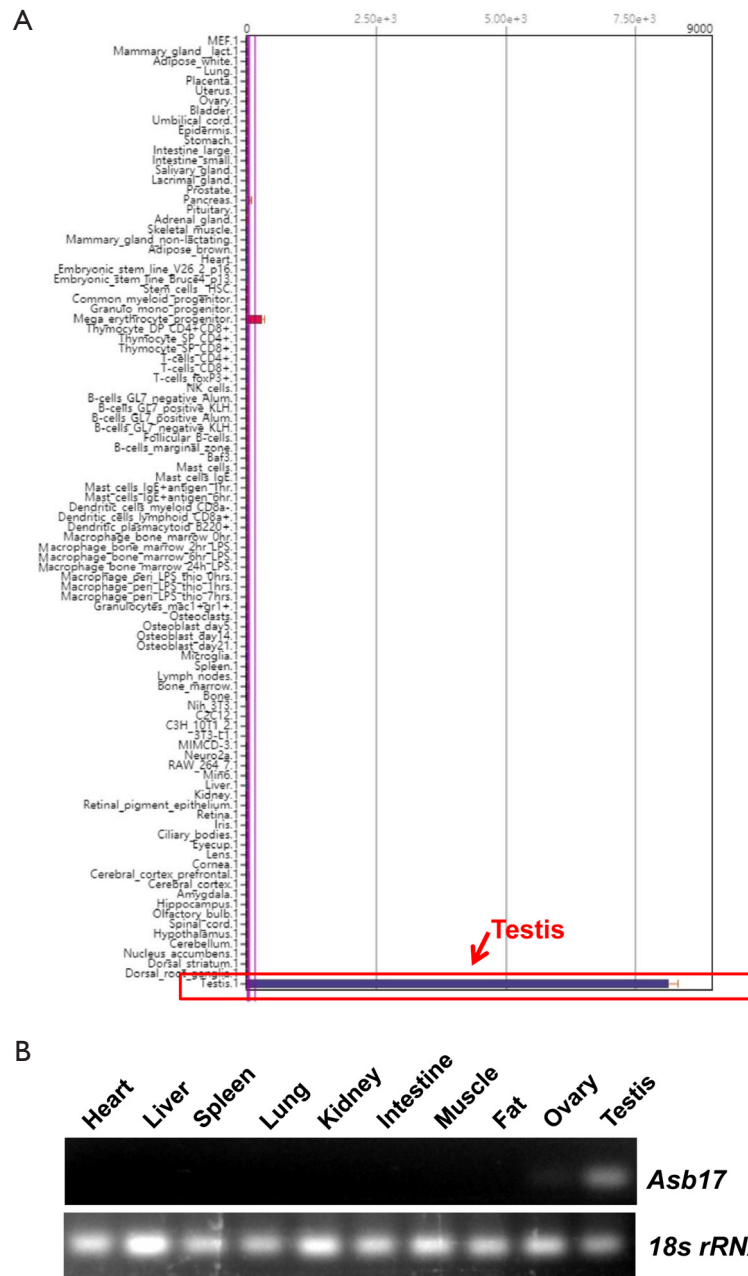


Figure S1 Expression profiling of *Asb17* in mice. (A) Bioinformatic analysis of *Asb17* expression in multiple tissues and cells of mice. The data are acquired from the BioGPS database based on microarray analysis (<http://biogps.org/>). (B) RT-PCR analysis of *Asb17* in multiple murine tissues. *Asb17*, ankyrin repeat and SOCS box protein 17.

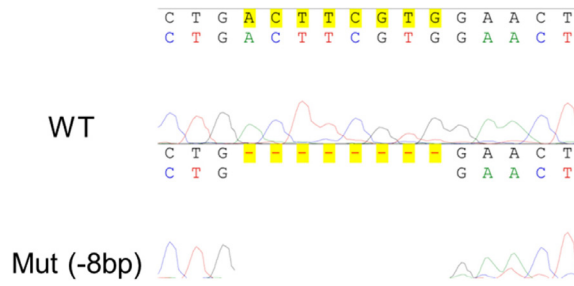


Figure S2 Sanger sequencing of Asb17 gene. Asb17, ankyrin repeat and SOCS box protein 17.

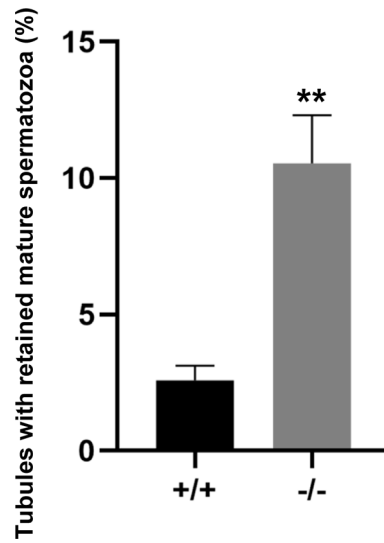


Figure S3 Quantification of tubules with “retained mature spermatozoa”. **P<0.01.