

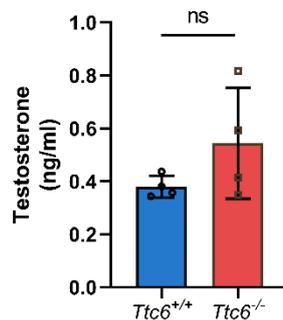
1 **TTC6-mediated stabilization of the flagellum annulus ensures the**
 2 **rapid and directed motion of sperm**

3
 4 **Supplemental Figures**

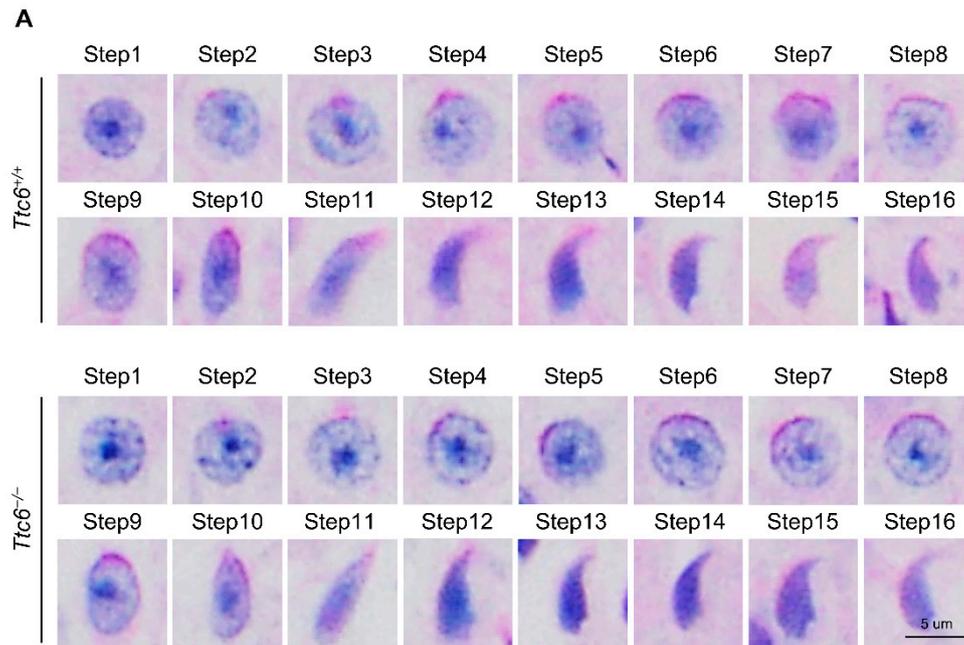
A

genotype	male #	litters born	litter size1	litter size2	litter size3	litter size4	litter size5	litter size6
+/+	1	6	7	8	8	9	7	7
	2	6	8	9	5	4	6	6
	3	6	10	6	5	8	7	7
	4	6	8	8	3	10	9	8
	5	6	7	6	6	8	5	7
	6	6	5	7	10	8	6	9
-/-	1	1	2					
	2	1	1					
	3	0						
	4	0						
	5	0						
	6	0						

B



5
 6 **Supplementary Figure S1.** *Ttc6* knockout leads to male subfertility but unaltered
 7 hormone levels. (A) The mating test using wild type female mice coupled with *Ttc6*^{+/+}
 8 or *Ttc6*^{-/-} adult male mice. The number of deliveries for each *Ttc6*^{+/+} or *Ttc6*^{-/-} adult
 9 male mouse is described. Litter size is the number of pups in each delivery. (B)
 10 Hormone levels remained unaltered in *Ttc6*^{-/-} mice. Estrone, cortisol, progesterone, and
 11 testosterone levels were compared between *Ttc6*^{+/+} and *Ttc6*^{-/-} mice. Data are presented
 12 as the mean ± SEM. Two-tailed Student's t-test; ns: no significance.



13

14 **Supplementary Figure S2. Disruption of *Ttc6* had no effect on acrosome biogenesis.**

15 (A) Step 1 through Step 16 of spermatogenesis in *Ttc6*^{+/+} and *Ttc6*^{-/-} testis stained with

16 PAS-hematoxylin. Scale bar, 5 μm.