Experiments	Male	Female	No.of oocytes	No. of 2-cell embryos	Percentage of 2 cell embryos
1	Atg7Flox/Flox	WT	7	19	64.9
2		WT	8	37	
3		WT	20	13	
1		wт	48	0	
2	TNAP- Atg7≁	wт	35	0	0
3		WT	37	0	

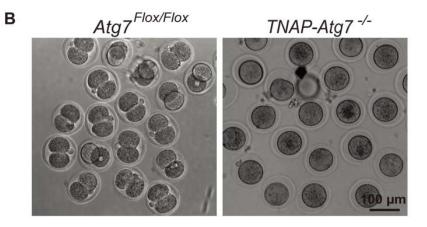


Figure S2 *In vivo* fertilization capacity of control and *TNAP-Atg7^{-/-}* mouse spermatozoa. **(A)** The control or *TNAP-Atg7^{-/-}* male mice were mated with the wild-type, and female oviducts were checked for 2-cell embryos. No *TNAP-Atg7^{-/-}* mice had 2-cell embryos, compared with 64.9% in the control group. **(B)** Representative images of the experiment in A. Bar: 100 μ m.