

***Usp26* mutation in mice leads to defective spermatogenesis depending on genetic background**

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**Authors and affiliations:**

Kohei Sakai<sup>1</sup>, Chizuru Ito<sup>2</sup>, Mizuki Wakabayashi<sup>1</sup>, Satoko Kanzaki<sup>1</sup>, Toshiaki Ito<sup>1</sup>, Shuji Takada<sup>3</sup>, Kiyotaka Toshimori<sup>2,4</sup>, Yoichi Sekita<sup>1</sup> and Tohru Kimura<sup>1,\*</sup>

10 <sup>1</sup> Laboratory of Stem Cell Biology, Department of Biosciences, Kitasato University School of Science, 1-15-1 Kitasato, Minami-ku, Sagamihara, Kanagawa 252-0373, Japan.

<sup>2</sup> Department of Functional Anatomy and Reproductive Biology and Medicine, Graduate School of Medicine, <sup>4</sup> Future Medicine Research Center, Chiba University Chiba University, 1-8-1, Inohana, Chuo-ku, Chiba, Chiba, 260-8670, Japan.

15 <sup>3</sup> Department of Systems BioMedicine, National Research Institute for Child Health and Development, 2-10-1, Okura, Setagaya-ku, Tokyo, 157-8535, Japan.

**Correspondence:**

20 \* Tohru Kimura, PhD

Laboratory of Stem Cell Biology, Department of Biosciences, Kitasato University School of Science,

1-15-1 Kitasato, Minami-ku, Sagamihara, Kanagawa, 252-0373, Japan

Tel: +81-42-778-8864; Fax: +81-42-778-8864

25 E-mail: tkimura@ Kitasato-u.ac.jp

Figure S1

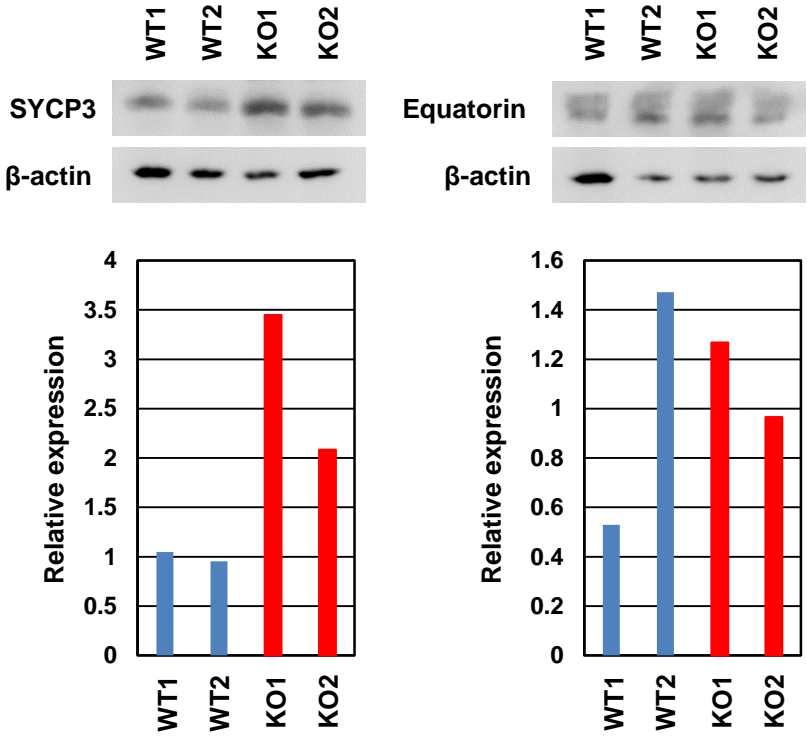
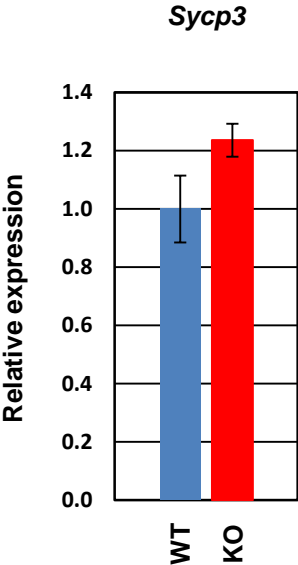
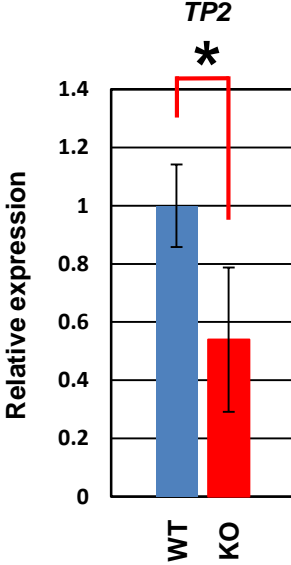
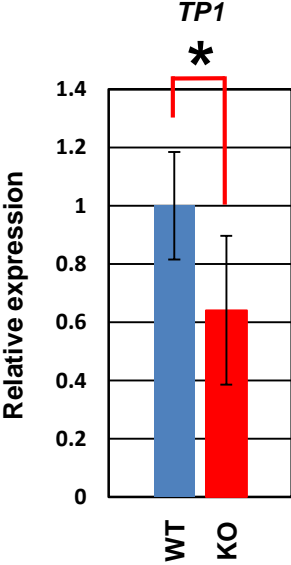
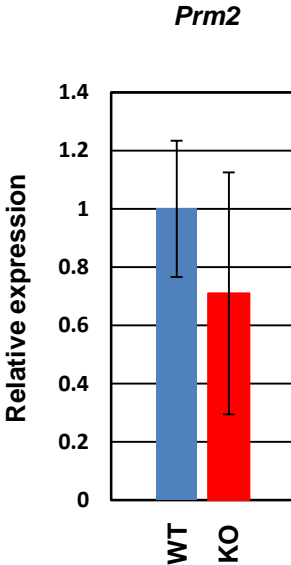
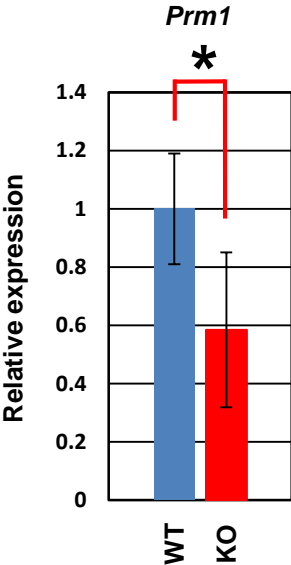


Figure S2

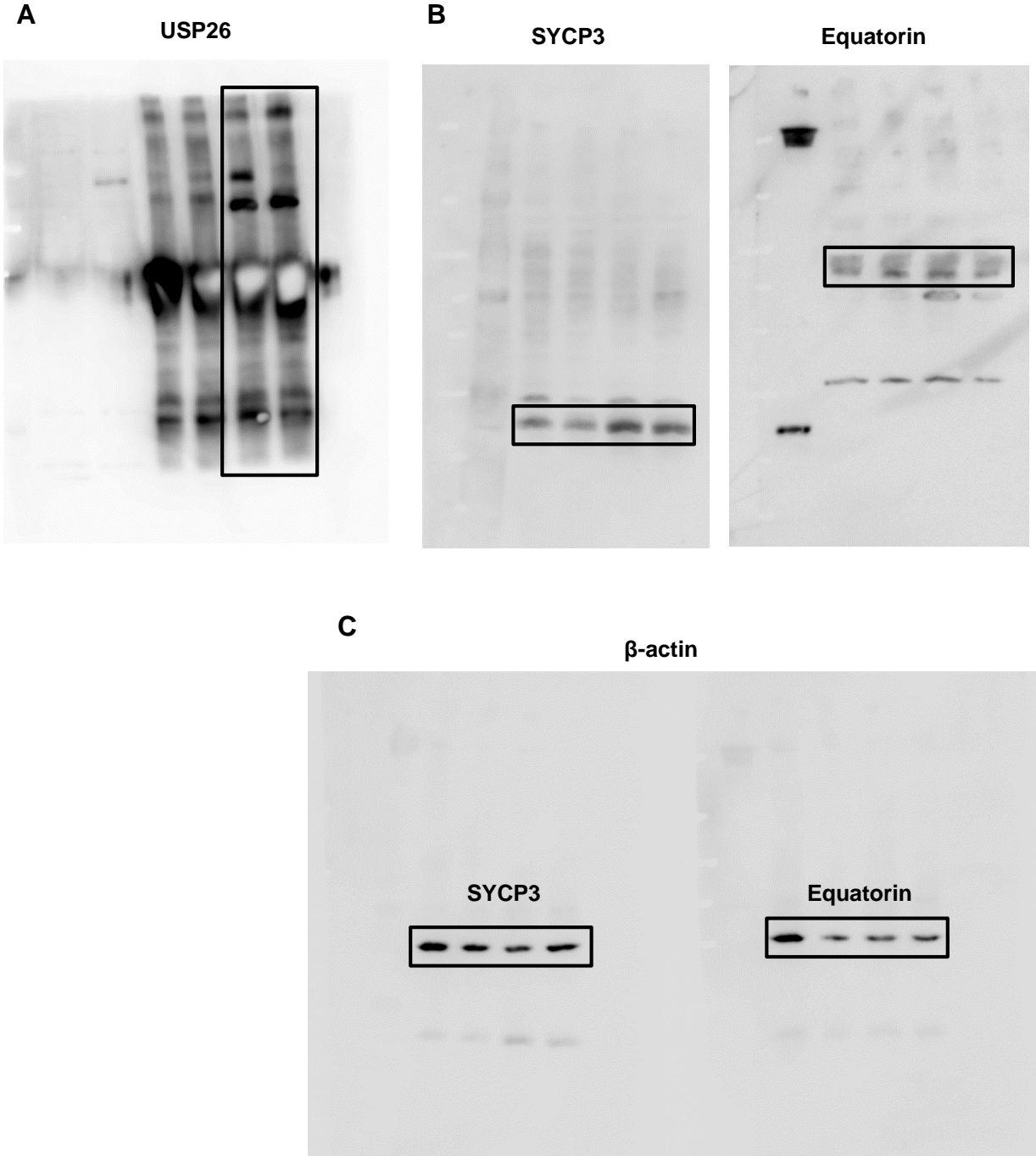
A



B



**Figure S3**



## Supplementary Figure Legends

**Figure S1.** The protein levels of SYCP3 and Equatorin in *Usp26* mutant testis.

Testes lysates were subjected to Western blot analysis using anti-SYCP3 and anti-Equatorin  
5 antibodies. The band intensities were quantified using Image-J software and the expression levels  
were normalized by expression of  $\beta$ -actin.

**Figure S2.** Expression of spermatocyte and spermatid marker genes in *Usp26* mutant testis.

The mRNA levels of spermatocyte (A; *Sycp3*) and spermatid (B; *Prm1*, *Prm2*, *TP1*, *TP2*) marker  
10 genes in testes were quantified by RT-qPCR analysis. The expression levels were normalized by  
expression of the housekeeping gene *Rplp0* (*Arbp*: ribosomal protein large P0). Expression of  
*Prm1*, *TP1* and *TP2* was significantly decreased in mutant mice (Student's *t*-test; \**P* < 0.05). The  
mean  $\pm$  standard deviation is shown.

15 **Figure S3.** Uncropped blot images for Figure 1D (A) and Figure S2 (B, C).

**Supplementary Tables**20 **Table S1 Primer sequences for qRT-PCR**

Gene	Sequence (5' to 3')	Sequence (5' to 3')
<i>Sycp3</i>	ATGGAAACTCAGCAGCAAGAG	TTTACTAAAGGCATGCCTCTTAGC
<i>Prm1</i>	TCAAAACTCCTGCGTGAGAA	GACAGGTGGCATTGTTTCCTT
<i>Prm2</i>	CCTGTCCATTCTGCCTGGAG	ACTCAGATCTCGTGGCTCCT
<i>TP1</i>	GTCTTCAAACAACACGGGGC	CGAATTCGTCACGACTGGC
<i>TP2</i>	TCCTGTGTCCATTTGATCCCA	AGTCTTCCAGGGTACAAGCT
<i>Arbp</i>	CAAAGCTGAAGCAAAGGAAGAG	ATTAAGCAGGCTGACTTGGTTG