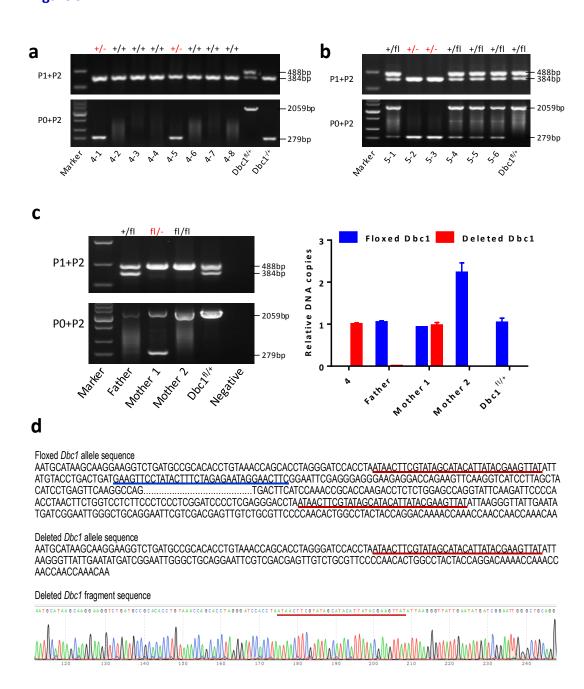
## **Supplementary Figures**

## Figure S1.



**Figure S1.** The conditional Dbc1 allele was completely deleted in some offspring of  $Foxp3^{Cre/Y}$   $Dbc1^{fl/+}$  crossing  $Foxp3^{Cre/Cre}$   $Dbc1^{fl/fl}$  mice. (a) The PCR product sizes of the offspring of mouse #4 in Figure 2a crossing Wt mice using the primer indicated. (b) The PCR product sizes of the offspring of mouse #5 in Figure 2a crossing Wt mice using the primer indicated. (c) Left panel: the PCR product sizes of the father and mother of mouse #4 and #5 in Figure 2a; right panel: the relative amounts of the floxed Dbc1 and recombined Dbc1 of father and mother of mouse #4 and #5 in Figure 2a were tested by qPCR. For qPCR, the results were normalized to the DNA sample from  $Dbc1^{fl/+}$  mice or mouse #4 in Figure 2a. The data were represented as the mean  $\pm$ 

standard deviation of three independent experiments. +/-, +/+, +/fl, fl/- and fl/fl show the genotype of *Dbc1* alleles. (d) The sequence of the deleted *Dbc1* allele. The red underlined sequence is Loxp site; the blue underlined sequence is FRT site.

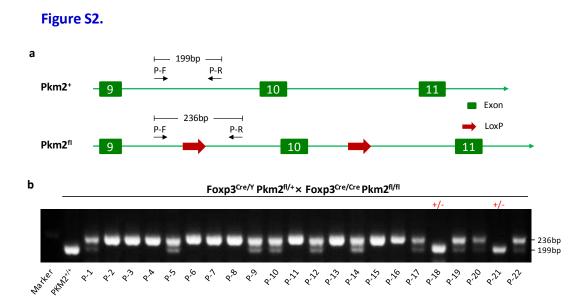


Figure S2. The conditional Pkm2 allele was completely deleted in some offspring of male  $Foxp3^{Cre/Y}$   $Pkm2^{fl/+}$  mice crossing female  $Foxp3^{Cre/Cre}$   $Pkm2^{fl/fl}$  mice. (a) Scheme of conditional Pkm2 allele. And the sites of the primer P-F and primer P-R. (b) The PCR product sizes of the offspring of  $Foxp3^{Cre/Y}$   $Pkm2^{fl/+}$  mice crossing female  $Foxp3^{Cre/Cre}$   $Pkm2^{fl/fl}$  mice using the primer indicated. +/- shows the genotype of Pkm2 alleles.

## Figure S3.

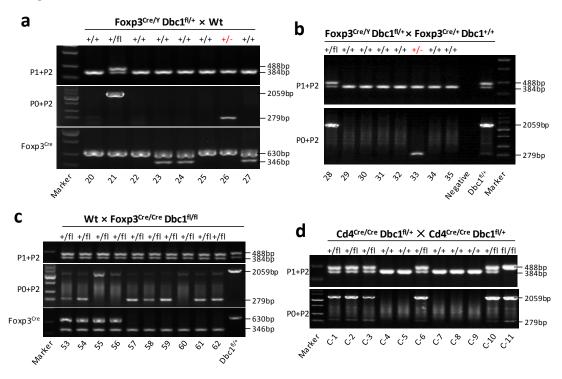
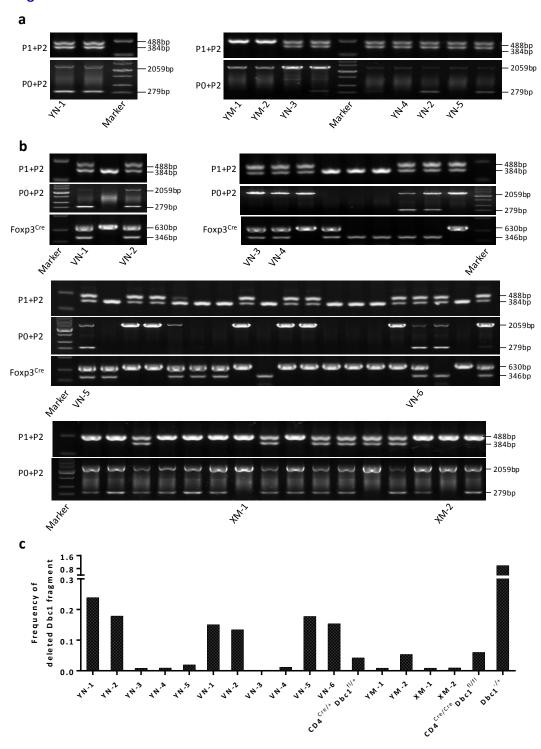


Figure S3. Genotype the mice in the progeny of different breeding pairs. (a) The PCR product sizes of the offspring of  $Foxp3^{Cre/Y}$   $Dbc1^{fl/+}$  × Wt mice using the primer indicated. (b) The PCR product sizes of the offspring of  $Foxp3^{Cre/Y}$   $Dbc1^{fl/+}$  ×  $Foxp3^{Cre/+}$   $Dbc1^{fl/+}$  mice using the primer indicated. (c) The PCR product sizes of the offspring of Wt ×  $Foxp3^{Cre/Cre}$   $Dbc1^{fl/fl}$  mice using the primer indicated. (d) The PCR product sizes of the offspring of female  $CD4^{Cre/Cre}$   $Dbc1^{fl/+}$  mice crossing with male  $CD4^{Cre/Cre}$   $Dbc1^{fl/+}$  mice using the primer indicated. +/-, +/+, +/fl, and fl/fl show the genotype of Dbc1 alleles. The panel of  $Foxp3^{Cre}$  shows the genotype of Foxp3-IRES-YFP-Cre alleles.

## Figure S4.



**Figure S4. The genotype of mice chosen to breed.** (a) The genotype of male mice chosen to breed in table 1. (b) The genotype of female mice chosen to breed in table 1. (c) The frequency of recombined *Dbc1* fragment in the mice chosen to breed in table 1.



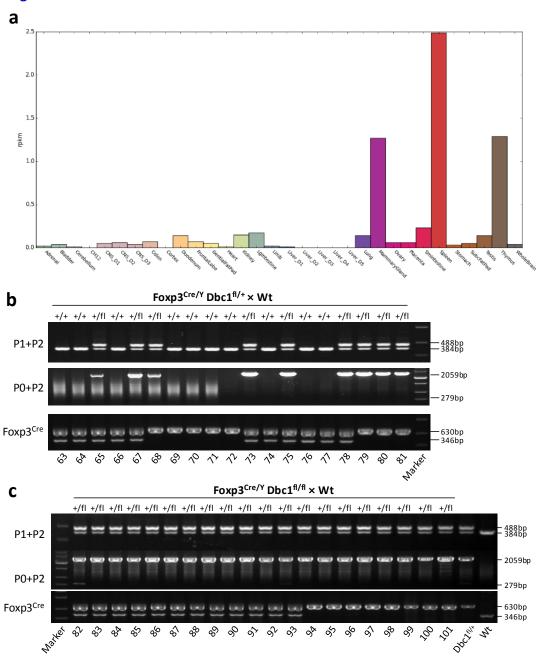


Figure S5. The expression of Foxp3 in the testis did not cause knockout of Dbc1 allele in the offspring of  $Foxp3^{Cre/Y}$   $Dbc1^{fl/+}$  mice

(a) Foxp3 expression across multiple tissues/cell lines (Data come from ENCODE). (b) The PCR product sizes of the offspring of Wt female mice crossing male  $Foxp3^{Cre/Y}$   $Dbc1^{fl/+}$  mice with a low frequency of recombined Dbc1 fragment using the primer indicated. (c) The PCR product sizes of the offspring of Wt female mice crossing male  $Foxp3^{Cre/Y}$   $Dbc1^{fl/fl}$  mice with a low frequency of recombined Dbc1 fragment using the primer indicated. +/+, and +/fl show the genotype of Dbc1 alleles. The panel of  $Foxp3^{Cre}$  shows the genotype of Foxp3-IRES-YFP-Cre alleles.

Figure S6.

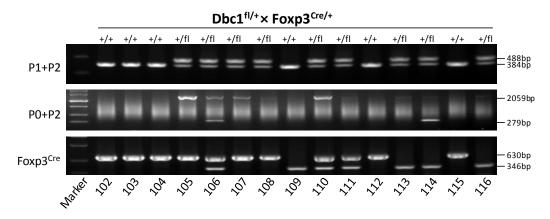


Figure S6. The *Dbc1* alleles of some fetuses in the progeny of  $Foxp3^{Cre}$  *Dbc1*<sup>fl</sup> mice were recombined. The PCR product sizes of the offspring of male  $Dbc1^{fl/+}$  mice crossing female  $Foxp3^{Cre/+}$  mice using the primer indicated. +/+, and +/fl show the genotype of Dbc1 alleles. The panel of  $Foxp3^{Cre}$  shows the genotype of  $Foxp3^{Cre}$  shows the genotype of  $Foxp3^{Cre}$  alleles.