Table S1

Production of hCD46.hTBM #2 transgenic pigs via somatic cell nuclear transfer (SCNT)

Donor cells	No. of recipients	Average no. of SCNT embryos transferred	Pregnancy (%)	Delivery (%)	Offspring (Mean ± SEM)
hCD46.hTBM #2	3	313.7 ± 10.2	2 (66.7)	1 (33.3)	1

1

Table S2

Oligonucleotide primers used for polymerase chain reaction

CGTCCAGGTACTCGAA CACTTCC Primer name	Primer sequence (5'-3')	Capable of application for genotyping
F1 primer	GACTTGGCTAATTTGCCAGT	hCD46.hTBM KI, hCD59.hCD47 KI
F2 primer	TGTTGGGAATCAGTCCTCTACTAG	hCD46.hTBM KI, hCD59.hCD47 KI
R1 primer	GGTGTCAGTGAATCCTACTT	hCD46.hTBM KI, hCD59.hCD47 KI
R2 primer	CGTCCAGGTACTCGAACACTTCC	hCD46.hTBM KI
R3 primer	TGGAATCTCCAAGGCGTCGTAGT	hCD46.hTBM KI, hCD59.hCD47 KI

KI: Knock-in

2

Table S3

Oligonucleotide primers used for real-time polymer chain reaction

Primer	Primer sequence (5'-3')		Product size
	Forward	Reverse	
hCD46	GCAAGCAGATCAGCGGCTTC	TGGTGGACACCTTCAGGCACTT	159 bp
hTBM	CCAGACTGGACCTGAATGGCG	GGGTGCCGTAGGTGATAGACAC	219 bp

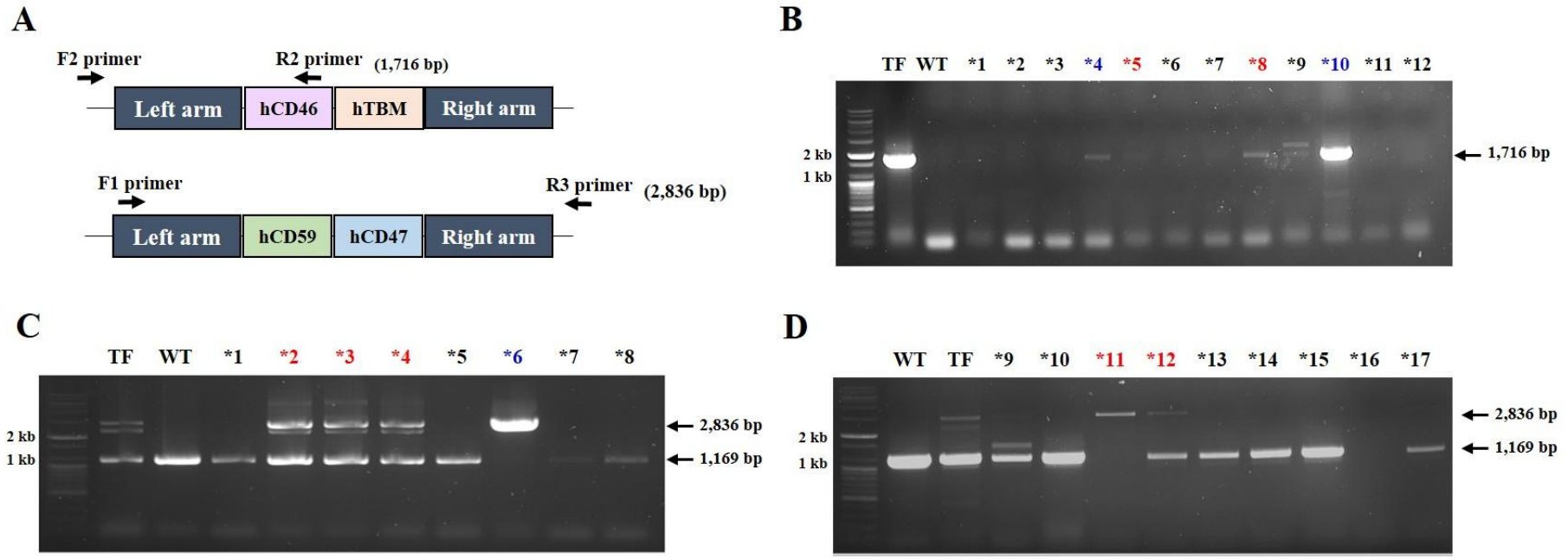

Fig S1. Gene analysis for the selection of knock-in cell lines. **(A)** Schematic diagram of the hCD46.hTBM KI and hCD59.hCD47 KI vectors, including the positions of PCR primers. When hCD46 and hTBM are successfully inserted, a 1,716-bp band is detected for the knock-in allele, whereas no band is observed for the wild-type allele. Similarly, when hCD59 and hCD47 are inserted, the knock-in allele yields a 2,836-bp band, whereas the wild-type allele produces a 1,169 bp band. **(B)** Gene analysis for the selection of cell lines in which the hCD46.hTBM KI vector was correctly inserted. Among the four candidates (*4, *5, *8, and *10), line *10 was designated as hCD46.hTBM KI #1, and line *4 as hCD46.hTBM KI #2 donor cells. **(C–D)** Gene analysis for the selection of cell lines in which the hCD59.hCD47 KI vector was correctly inserted. Among the six candidates (*2, *3, *4, *6, *11, and *12), line *6 was selected as the hCD59.hCD47 KI donor cell line. Red and blue numbers

indicate cell lines in which knock-in was confirmed; among them blue numbers represent the cell lines used as donor cells for somatic cell nuclear transfer. The original agarose gel images are presented in Figure S3. bp: base pair; TF: Transfectant.

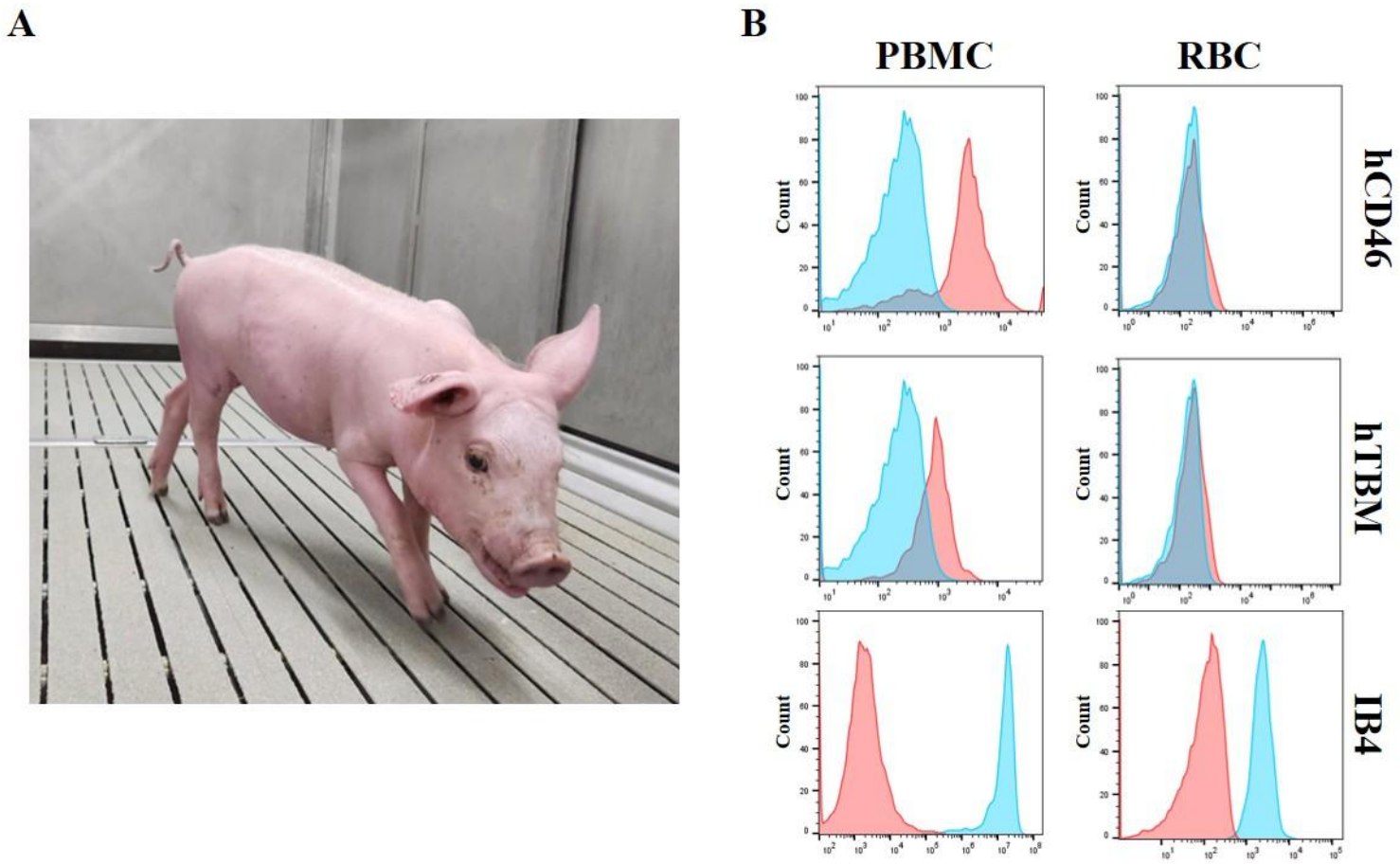

Fig. S2. Cloned transgenic pigs derived from a different colony than the one used to produce the hCD46.hTBM #2 pigs with *hCD46* and *hTBM* insertion. **(A)** Transgenic cloned pig. **(B)** hCD46 and hTBM expression analysis in peripheral blood mononuclear cells (PBMC) and

20 red blood cells (RBC) from transgenic pigs. α-gal expression was not detected in either group. Red: Cloned transgenic pig. Blue: Wild type

21 pig.

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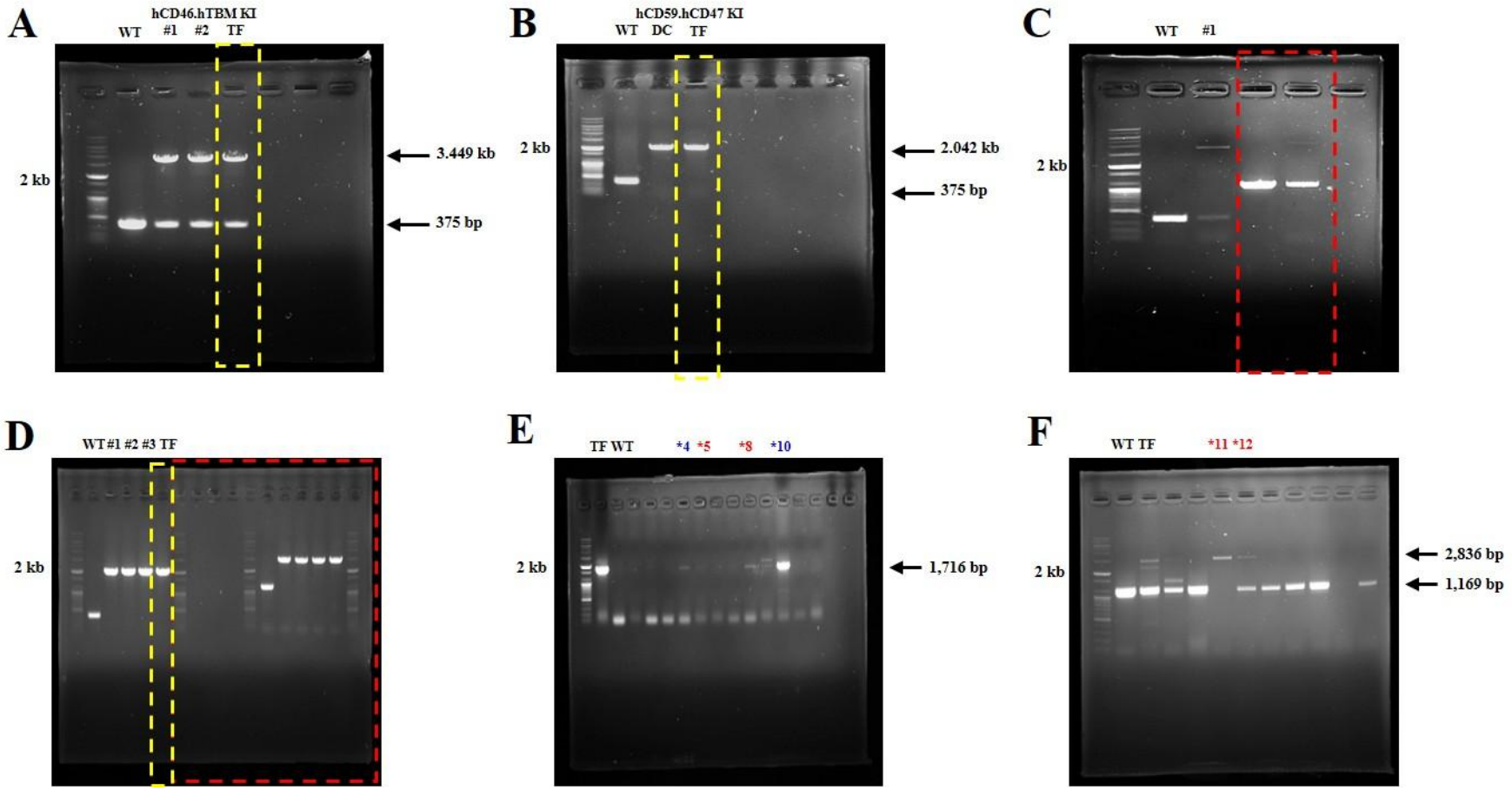

Fig. S3. The original agarose gel images used in this study. (A) Original image corresponding to Figure 1B. (B) Original image corresponding to Figure 1D. (C) Original image corresponding to Figure 2B. (D) Original image corresponding to Figure 2D. (E Original image corresponding to Figure S1B. (F) Original image corresponding to Figure S1D. Unfortunately, the original image for Figure S1C is

unavailable due to unintentional data loss. However, the experiment shown in Figure S1C was conducted for the same purpose as Figure S1D, namely the screening of donor cell candidates, and involved loading samples onto a 12-comb agarose gel, as in Figure S1D. DC: Donor cell; TF: Transfectant; kb: kilobase; bp: base pair. Red dashed box: Not related band to the present study. Yellow dashed box: Transfectant band excluded from the main figure.