## **Supporting Information**

## Kumasawa et al. 10.1073/pnas.1011293108

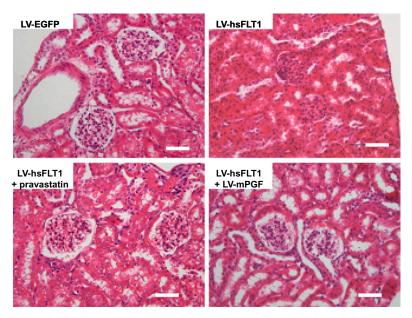


Fig. S1. Restored glomerular sclerosis in preeclampsia by pravastatin treatment or mPgf overexpression. Glomerular sclerosis was observed in the females carrying LV-hsFLT1–transduced placentas. The kidney was collected at E18.5, and the sections were stained with H&E. The symptoms were rescued by pravastatin treatment or placenta-specific mPgf expression. (Scale bar = 50  $\mu$ m.)

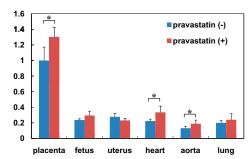


Fig. 52. Pravastatin induced mPgf expression in various tissues. Pravastatin (5  $\mu$ g/d) was i.p. administered into the pregnant females every day from E7.5, and then the mPgf mRNA amounts in total RNA were measured by quantitative RT-PCR at E13.5 (n = 4). Pravastatin significantly increased the mPgf mRNA in placenta, heart, and aorta (\*P < 0.05).

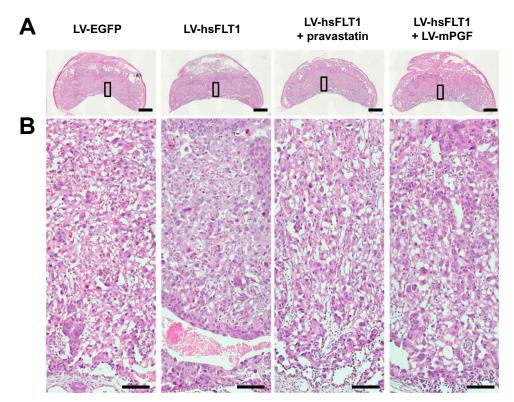


Fig. S3. Restored placentation by pravastatin treatment or mPgf overexpression. The placenta was collected at E13.5, and the sections were stained with H&E. Labyrinthine area in A is magnified in B. The maternal and fetal blood spaces were reduced in the labyrinthine layer of the LV-hsFLT1–transduced placenta. The phenotypes were rescued by pravastatin treatment or placenta-specific mPgf expression. (Scale bar = 1 mm in A and 100  $\mu$ m in B.)

Table S1. Implantation and birth rate

Lentiviral vector	n	Transferred	Implanted, %	Born, %
LV-EGFP	11	220	99 (45.0 ± 1.8)	82 (37.3 ± 1.7)
LV-hsFLT1	11	220	100 (45.5 ± 2.0)	85 (38.6 ± 2.5)
LV-hsFLT1 + pravastatin	10	200	89 (44.5 ± 0.9)	$76 (38.0 \pm 1.0)$
LV-hsFLT1 + LV-mPGF	12	240	108 (45.0 ± 1.2)	90 (37.5 ± 1.3)

Blastocysts were transduced with lentiviral vectors at 100 ng of p24/mL. Pravastatin was administered at 5  $\mu$ g per body every day starting at E7.5. Implantation rate was analyzed at E13.5 (average  $\pm$  SEM). Student's t test was performed against LV-EGFP treatment.

Table S2. Liver enzymes

		Aspartate transaminase			Alanine transaminase		
Lentiviral vector	n	average, U/mL	P	n	average, U/mL	Р	
LV-EGFP	9	85 ± 16.2	_	9	27.7 ± 3.0		
LV-hsFLT1	10	$190 \pm 64.5$	0.15	10	32.1 ± 9.7	0.68	
LV-hsFLT1 + pravastatin	9	113 ± 13.3	0.21	9	$28.9 \pm 3.7$	0.80	
LV-hsFLT1 + LV-mPGF	13	$124 \pm 23.0$	0.23	12	$32.4 \pm 6.7$	0.57	

Blastocysts were transduced with lentiviral vectors at 100 ng of p24/mL. Pravastatin was administered at 5  $\mu$ g per body every day starting at E7.5. Blood samples were collected at E18.5 and analyzed (average  $\pm$  SEM). Student's t test was performed against LV-EGFP treatment.