

SUPPLEMENTAL FIGURE LEGENDS

FIG. S1. Mouse urine and blood constituents. (A) Urine was collected daily from pregnant mice at 15.5 dpc to 18.5 dpc. Urine albumin and creatinine were assayed in WT dams treated with $ERR\gamma$ agonist DY131 or vehicle (DMSO). (B) Urine was collected daily from 14.5 dpc to 18.5 dpc. Total urine potassium excretion over each 24 h period was assayed in $ERR\gamma^{+/-}$ and WT dams. (C) Serum potassium was assayed in $ERR\gamma^{+/-}$ and WT dams at 18.5 dpc. Values are means \pm SEM. **** P <0.01.**

FIG. S2. $ERR\gamma$ deficient mice have lower blood pressure during pregnancy and postpartum. Systolic blood pressure was measured from 14.5 dpc to 18.5 dpc in the following groups: (A) WT ♀ mated either with WT ♂ ($\text{♀WT} \times \text{♂WT}$) or with $ERR\gamma^{+/-}$ ♂ ($\text{♀WT} \times \text{♂HET}$); (B) $ERR\gamma^{+/-}$ ♀ mated either with $ERR\gamma^{+/-}$ ♂ ($\text{♀HET} \times \text{♂HET}$) or WT ♂ ($\text{♀HET} \times \text{♂WT}$). (C) Systolic blood pressure was measured in $ERR\gamma^{+/-}$ ♀ mated with WT ♂ (WT) and WT ♀ (mated with $ERR\gamma^{+/-}$ ♂) from 14.5 dpc to 18.5 dpc and from postpartum days 9 to day 13. Systolic blood pressure was measured from 14.5 dpc to 18.5 dpc in the following groups: (D) WT ♀ mated with WT ♂ with (L-NAME WT) or without (Nontreated WT) treatment with the e-NOS inhibitor, L-NAME; (E) $ERR\gamma^{+/-}$ ♀ mated with $ERR\gamma^{+/-}$ ♂ with (L-NAME HET) or without (Nontreated HET) treatment with L-NAME; (F) WT ♀ mated with WT ♂ with (2% salt WT) or without (Nontreated WT) high salt (2%) treatment; (G) $ERR\gamma^{+/-}$ ♀ mated with $ERR\gamma^{+/-}$ ♂ with (2% salt HET) or without (Nontreated HET) high salt treatment. Values are means \pm SEM. *** P <0.05, ** P <0.01, *** P <0.001.**

FIG. S3. $ERR\gamma$ is expressed both in labyrinth and spongiotrophoblast of mouse placenta. (A) Wild type (WT), $ERR\gamma^{+/-}$ (HET) and $ERR\gamma^{-/-}$ (HOMO) placentas from $ERR\gamma^{+/-}$ dams were collected at 18.5 dpc;

labyrinth and spongiotrophoblast enriched tissues were microdissected. mRNA expression of $ERR\gamma$ was analyzed by qRT-PCR; RPLP0 was used as the internal reference. Values are means \pm SEM, $**P<0.01$. $***P<0.001$. (B) Proteins isolated from WT and $ERR\gamma^{+/-}$ placentas from $ERR\gamma^{+/-}$ dams at 18.5 dpc were analyzed by immunoblotting using antisera to $ERR\gamma$ or β -actin, as loading control.

FIG. S4. Renin-angiotensin system was unaltered in the kidneys of $ERR\gamma^{+/-}$ pregnant mice. RNA was isolated from the kidneys of $ERR\gamma^{+/-}$ or WT dams at 18.5 dpc. mRNA expression of angiotensinogen, renin, angiotensin I converting enzyme 1 (*Ace1*), angiotensin I converting enzyme 2 (*Ace2*) and angiotensin II type 1a receptor (*Agtr1a*) was analyzed by qRT-PCR; RPLP0 was used as the internal reference.

FIG. S5. *Cyp11a1* and *Cyp21* expression was unaltered in adrenal glands of $ERR\gamma^{+/-}$ non-pregnant mice. RNA isolated from adrenal glands of $ERR\gamma^{+/-}$ or WT non-pregnant mice was analyzed for mRNA expression of *Cyp11a1* and *Cyp21* by qRT-PCR; RPLP0 was used as the internal reference. Values are means \pm SEM. $*P<0.05$.

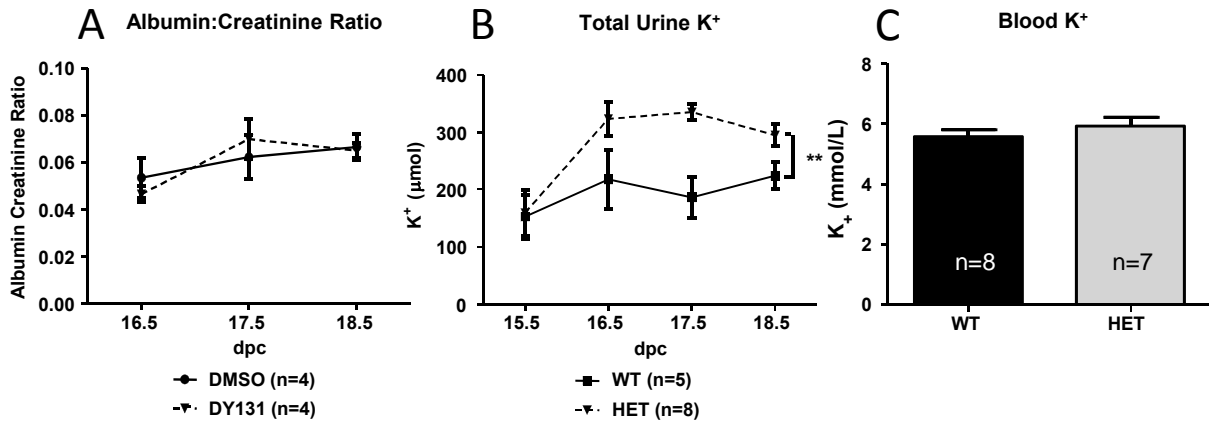
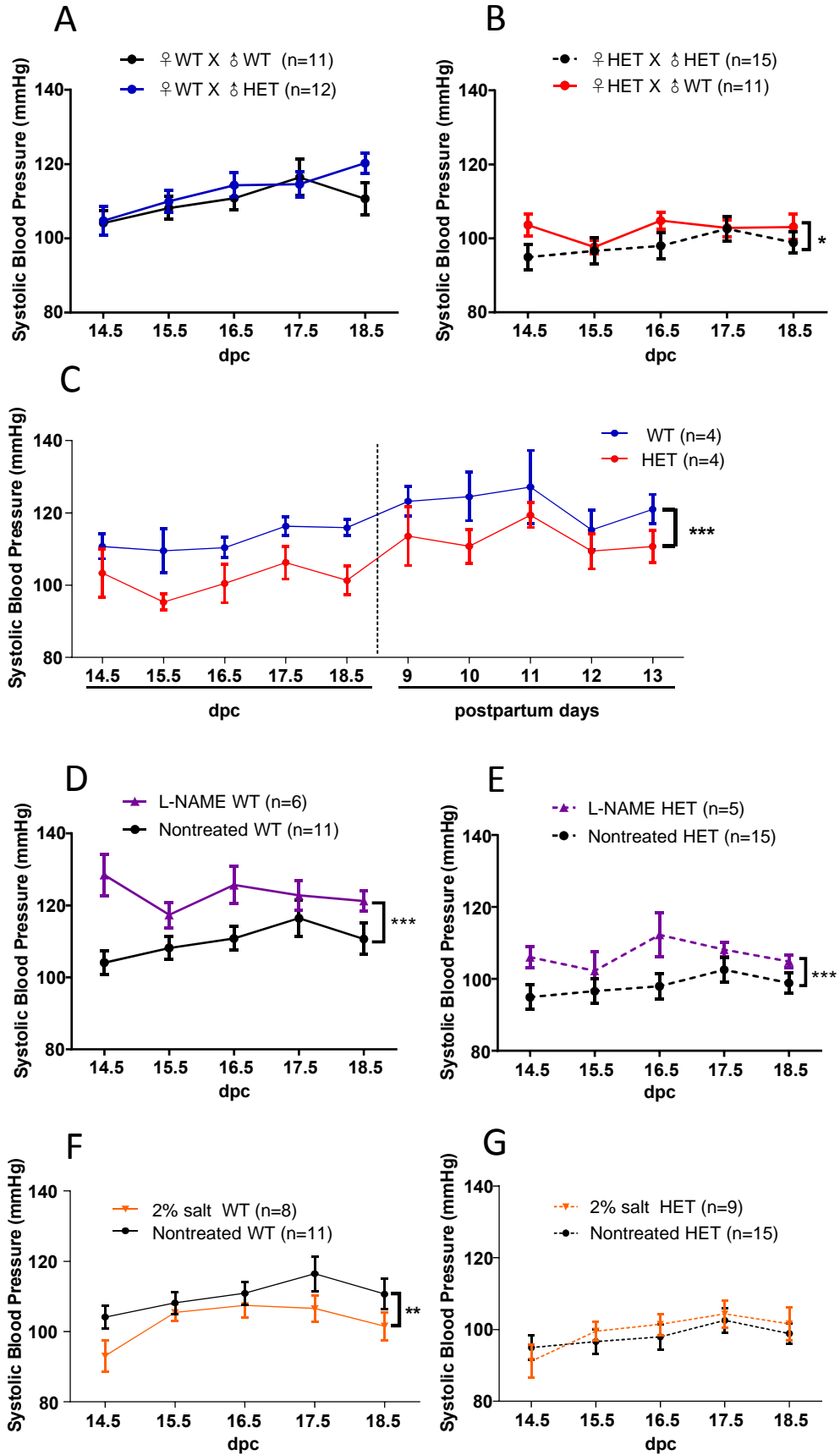
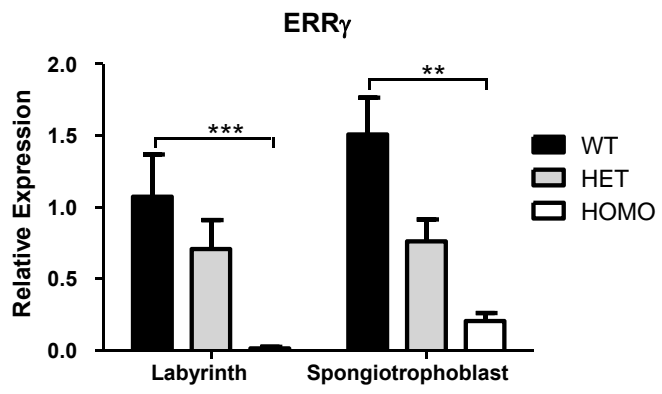


Figure S1



A



B

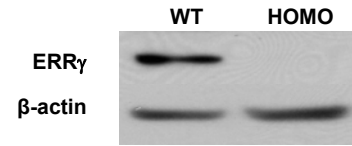


Figure S3

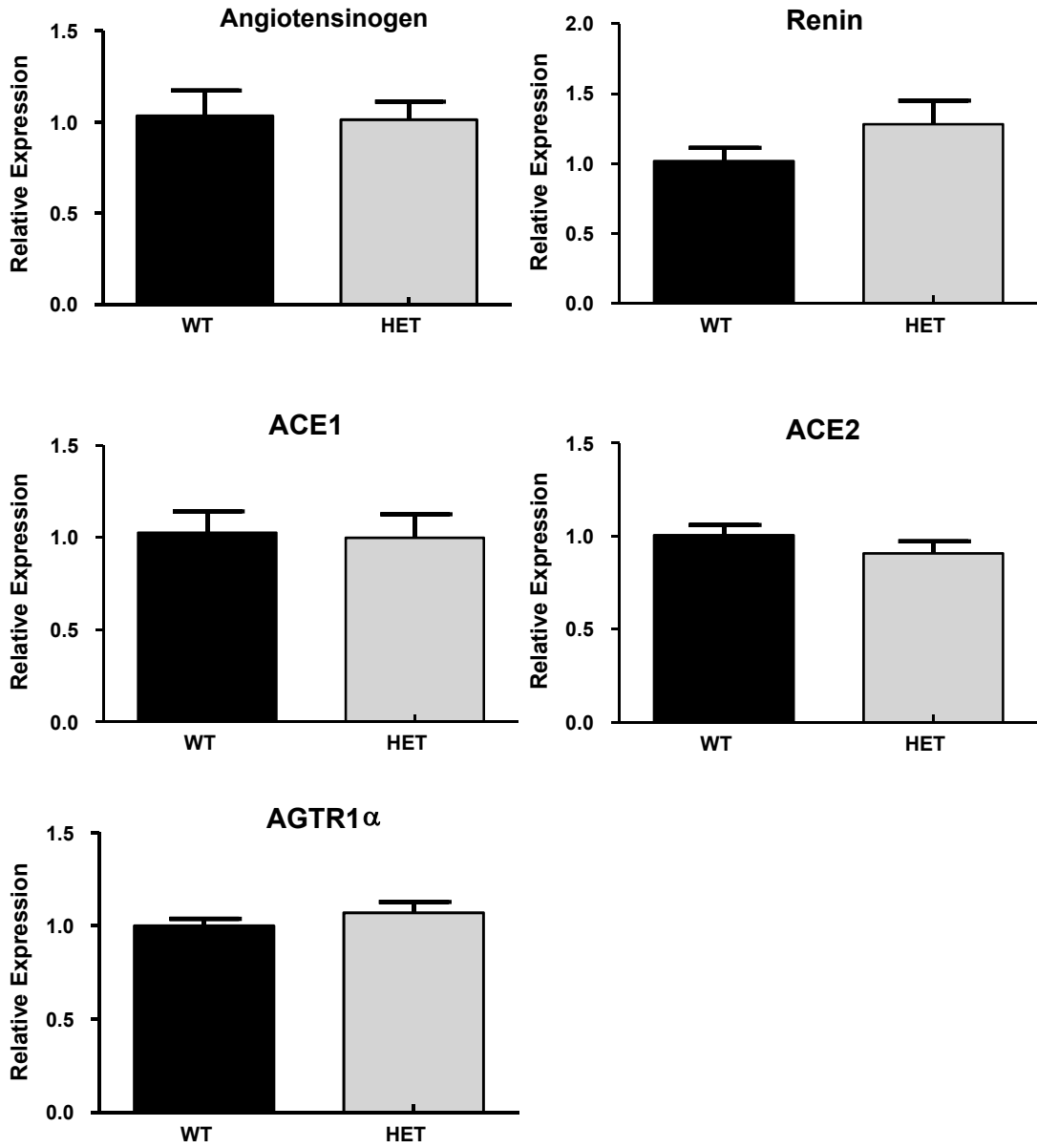


Figure S4

A

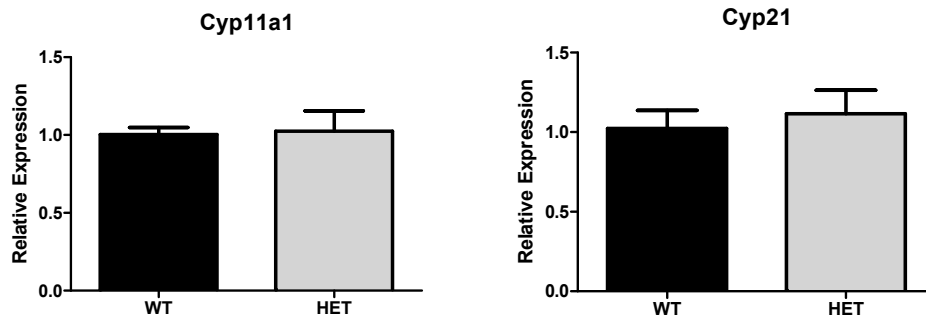


Figure S5