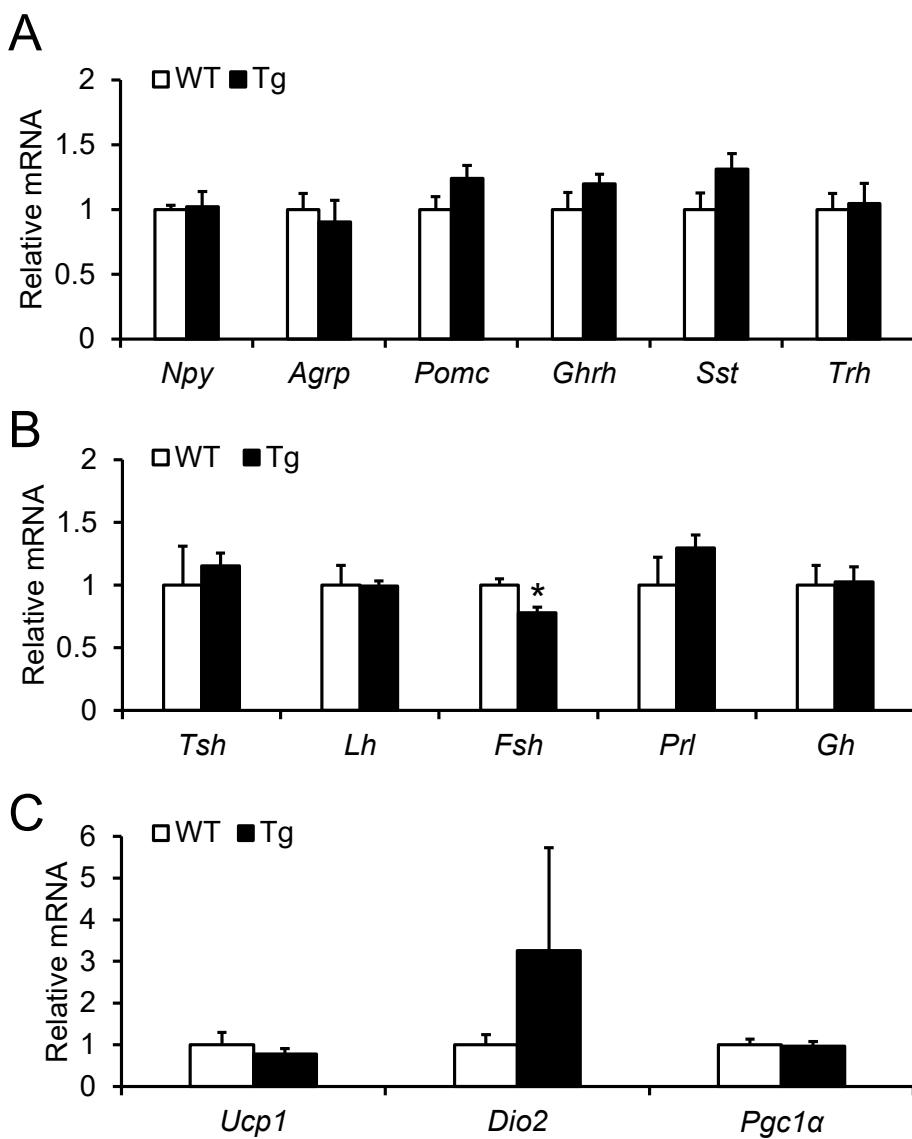


**Supplementary Figure S1.**

Phenotypic analysis of body mass and peripheral tissues of the 17-line of *Npgl* Tg mice. **(A)** Weekly body mass changes (left) and body mass (right) at 27 weeks of age of WT and *Npgl* Tg mice. **(B)** The masses of the testis, liver, kidney, and heart. **(C)** The masses of gastrocnemius and soleus muscles. **(D)** The length of the femur as an index of body length. **(E)** The masses of inguinal, epididymal, retroperitoneal, and perirenal WAT. **(F)** The mass of interscapular BAT. All statistical analyses were performed using Mann-Whitney U test. Each value represents the mean  $\pm$  SEM ( $n = 5$ ). Asterisks indicate statistically significant differences (\* $P < 0.05$ , \*\* $P < 0.01$ ). *Npgl*, neurosecretory protein GL; WT, wild-type; Tg, transgenic; WAT, white adipose tissue; BAT, brown adipose tissue.



**Supplementary Figure S2.**

mRNA expression analysis of adipose tissues of *Npgl* Tg mice. (A) The mRNA expression levels of *Npy*, *Agrp*, *Pomc*, *Ghrh*, *Sst*, and *Trh* in the mediobasal hypothalamus. (B) The mRNA expression levels of *Tsh*, *Lh*, *Fsh*, *Prl* and *Gh* in the pituitary gland. (C) The mRNA expression levels of *Ucp1*, *Dio2*, and *Pgc1α* in interscapular BAT. All statistical analyses were performed using Mann-Whitney U test. Each value represents the mean  $\pm$  SEM ( $n = 5-8$ ). Asterisk indicates a statistically significant difference (\* $P < 0.05$ ). *Npgl*, neurosecretory protein GL; WT, wild-type; Tg, transgenic; *Npy*, neuropeptide Y; *Agrp*, agouti-related peptide; *Pomc*, proopiomelanocortin; *Ghrh*, growth hormone-releasing hormone; *Sst*, somatostatin; *Trh*, thyrotropin-releasing hormone; *Tsh*, thyroid-stimulating hormone; *Lh*, luteinizing hormone; *Fsh*, follicle-stimulating hormone; *Prl*, prolactin; *Gh*, growth hormone; BAT, brown adipose tissue; *Ucp1*, uncoupling protein 1; *Dio2*, type 2 iodothyronine deiodinase; *Pgc1α*, peroxisome proliferator-activated receptor- $\gamma$  coactivator 1 $\alpha$ .