

Supplemental Figures

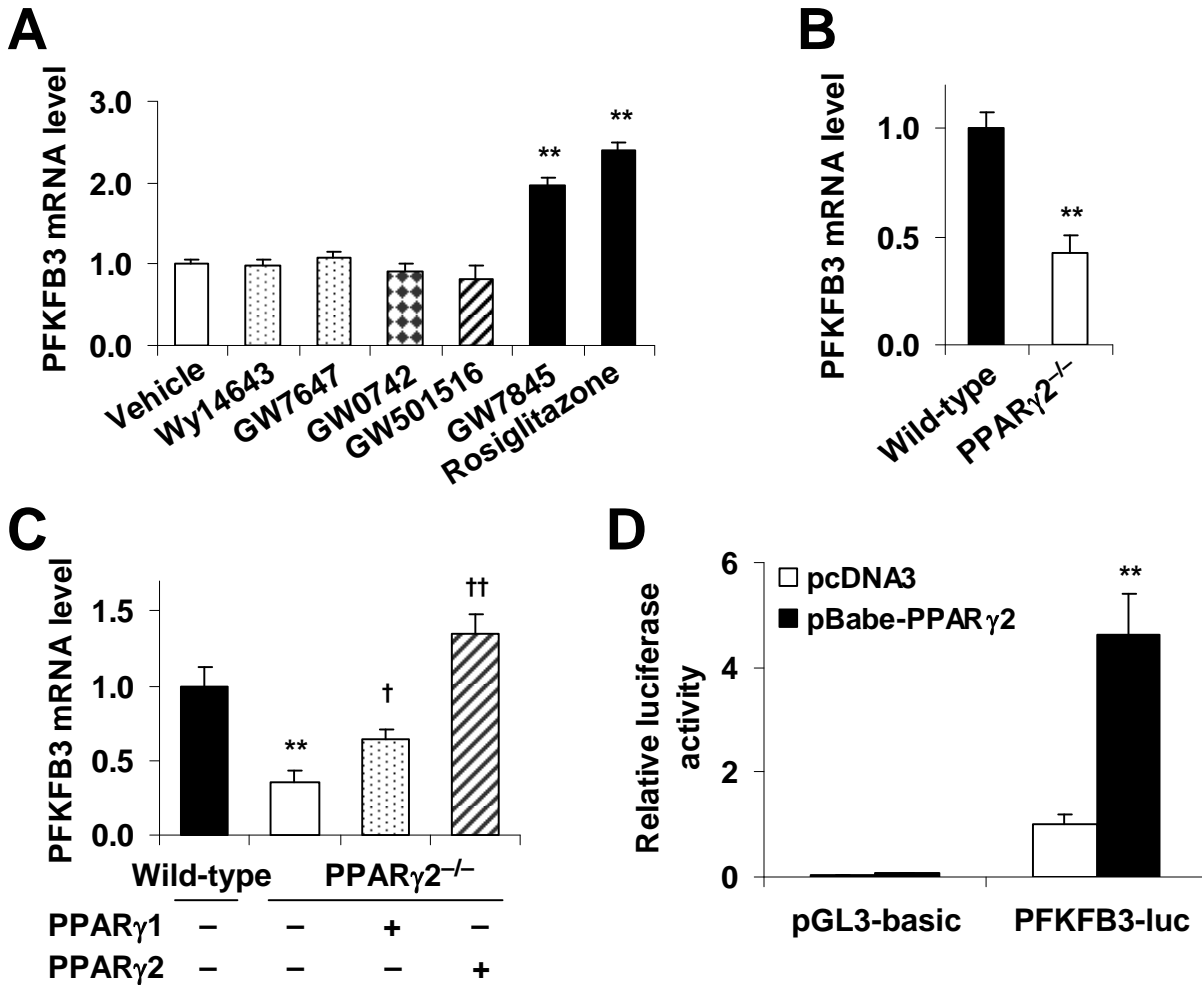


Fig. S1. PPAR $\gamma$  activation stimulates PFKFB3 expression in adipocytes/adipose tissue. For A–C, the mRNA levels of PFKFB3 were determined using real-time RT-PCR. Data are means  $\pm$  S.E. A, differentiated 3T3-L1 adipocytes were treated with vehicle (0.1 % DMSO), a PPAR $\alpha$  agonist (Wy14643 or GW7647), a dual agonist for PPAR $\alpha$  and PPAR $\delta$  (GW0742), a PPAR $\delta$  agonist (GW501516), or a PPAR $\gamma$  agonist (GW7845 or rosiglitazone).  $n = 4$ . \*\*,  $P < 0.01$  PPAR $\gamma$  agonist *versus* vehicle. B, epididymal adipose tissue samples were isolated from PPAR $\gamma$ <sup>-/-</sup> mice and wild-type mice.  $n = 8 - 9$ , \*\*,  $P < 0.01$  PPAR $\gamma$ <sup>-/-</sup> *versus* wild-type. C, mouse embryonic fibroblast cells were isolated from PPAR $\gamma$ <sup>+/+</sup> mice and PPAR $\gamma$ <sup>-/-</sup> mice and treated with retrovirus containing the cDNA of PPAR $\gamma$  1, PPAR $\gamma$  2, or control.  $n = 6$ . \*\*,  $P < 0.01$  PPAR $\gamma$ <sup>-/-</sup> alone *versus* wild-type; †,  $P < 0.05$  and ††,  $P < 0.01$  PPAR $\gamma$ <sup>-/-</sup> in the presence of PPAR $\gamma$ 1 or PPAR $\gamma$ 2 *versus* PPAR $\gamma$ <sup>-/-</sup> alone. D, effects of PPAR $\gamma$ 2 on PFKFB3 promoter activity. The PFKFB3 promoter-luciferase (PFKFB3-luc) construct or pGL3-basic plasmid was co-transfected with pBabe-PPAR $\gamma$ 2 or pcDNA3 into 3T3-L1 cells. Two days after transfection, cells were harvested for luciferase assays.  $n = 3$ . \*\*,  $P < 0.001$  PFKFB3-luc *versus* pcDNA3.

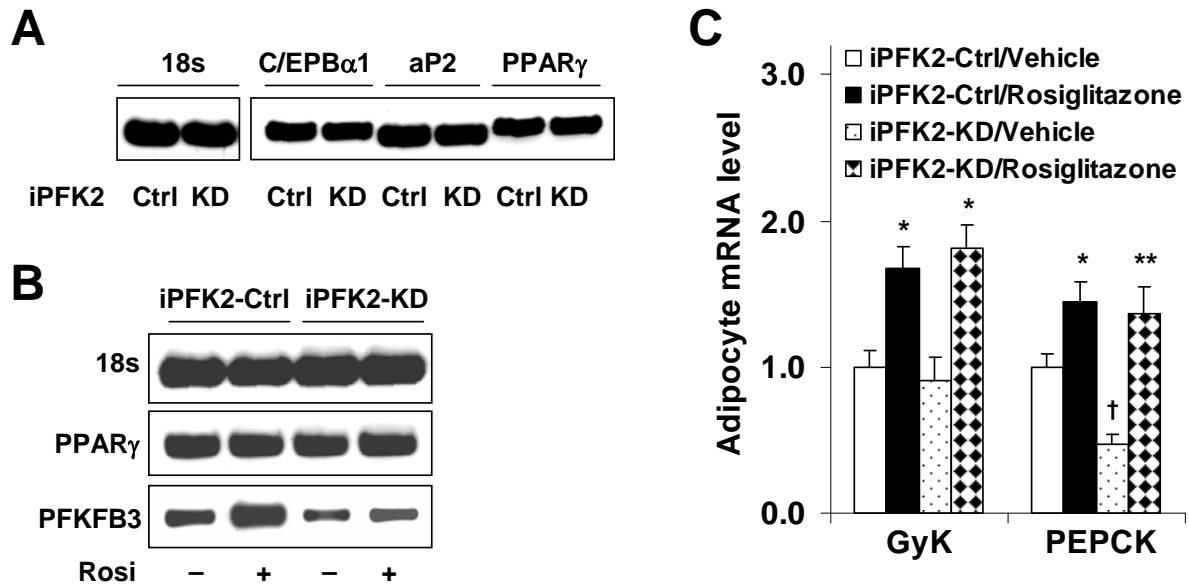


Fig. S2. PFKFB3/iPFK2 knockdown does not impair the effect of PPAR $\gamma$  activation on stimulating GyK and PEPCK expression in adipocytes. After differentiation for 6 days, stable iPFK2-KD adipocytes and iPFK2-Ctrl adipocytes were treated with rosiglitazone (Rosi, 1  $\mu$ M) or vehicle (0.1% DMSO) for 48 h. The mRNA levels of adipocyte genes of the treated cells were quantified using real-time RT-PCR. A and B, the representative PCR products of adipocyte genes. C, changes in the mRNA levels of GyK and PEPCK. Data are means  $\pm$  S.E. n = 4. \*,  $P < 0.05$  and \*\*,  $P < 0.01$  iPFK2-Ctrl/Rosiglitazone *versus* iPFK2-Ctrl/Vehicle or iPFK2-KD/Rosiglitazone *versus* iPFK2-KD/Vehicle for the same gene; †,  $P < 0.05$  iPFK2-KD/Vehicle *versus* iPFK2-Ctrl/Vehicle.