## **Supplementary Material**



**Figure S1.** Inhibition or activation of Wnt/ $\beta$ -catenin did not alter PPAR $\alpha$  DNA-binding activity. **(A)** LS174T cells were transfected with NTC or  $\beta$ -catenin siRNA (left) for 48 h or treated with 40 mg/ml NaCl as control or 40 mM LiCl (right) for 24 h. PPAR $\alpha$  DNA-binding activity was determined through PPAR $\alpha$  ELISA assays as described under Materials and Methods (n=3, data represents mean ± SD). **(B)** Expression of PLIN2 mRNA was assessed by real-time RT-PCR (n=3, data represents mean ± SD; \*p < 0.05 vs NTC or 40 mg/ml NaCl).



**Figure S2. PPAR** $\gamma$  **regulated HMGCS2 expression in Caco2 cells. (A)** Caco2 cells were transfected with NTC or PPAR $\gamma$  siRNA. Expression of PPAR $\gamma$  (left) and HMGCS2 (right) mRNA was determined by real-time RT-PCR (n=3, data represents mean ± SD; \*p < 0.05 vs NTC). **(B)** Caco2 cells were treated with RGZ for 24 h (left); Caco2 cells were treated iCRT3 for 24 h followed by combination with or without T 0070907 (T007) for additional 24 h (right). Protein level of HMGCS2 was measured by Western blot analysis (upper). The level of HMGCS2 mRNA was assessed by real-time RT-PCR (lower) (n=3, data represents mean ± SD; \*p < 0.05 vs control).



Figure S3. HMGCS2 and  $\beta$ -catenin inversely regulated glycolysis in intestinal cells. (A) Representative ECAR measurements obtained from the glycolysis stress test performed in LS174T cells transfected with HMGCS2 or  $\beta$ -catenin siRNA using the Seahorse XF96 Extracellular Flux analyzer (Agilent). Glucose, oligomycin and 2-DG were added at the indicated points. (B) ECAR associated with glycolytic capacity was calculated based on the measurements obtained upon the addition of individual compounds (n=9, data represents mean ± SD; \*p < 0.05 vs NTC). (C) LS174T cells were treated with 2-DG for 24 h. Expression of IAP mRNA was assessed by real-time RT-PCR (n=3, data represents mean ± SD; \*p < 0.05 vs 0 mM 2-DG).