

Supplementary Figures

Carbamazepine Enhances Adipogenesis by Inhibiting Wnt/ β -catenin Expression

Dong Uk Im^{1,2}, Sang Chon Kim², Gia Cac Chau¹, and Sung Hee Um^{1,2,3,*}

¹ Department of Molecular Cell Biology, Samsung Biomedical Research Institute, Sungkyunkwan University School of Medicine, Suwon, Gyeonggi-do 16419, Korea; ldw4545@gmail.com (D.I.); chaugiacac@gmail.com (G.C.)

² Department of Health Sciences and Technology, Samsung Advanced Institute for Health Sciences and Technology, Samsung Medical Center, Sungkyunkwan University, Seoul 06351, Korea; karls22@nate.com (S.K.)

³ Biomedical Institute Convergence at Sungkyunkwan University, Suwon, Gyeonggi-do, 16419, Korea

* Correspondence: shum@skku.edu; Tel: +82-31-299-6123, Fax: +82-31-299-6109

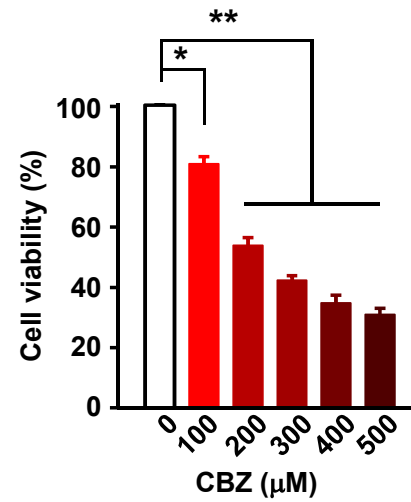


Figure S1. Effect of carbamazepine on the viability in 3T3-L1 cells.

Cell viability of 3T3-L1 cells treated with carbamazepine at various concentration for 24 h was analyzed by MTT assay (n = 3 per group). *t*-test, Values are mean ± SEM. *, $P < 0.05$; **, $P < 0.01$.

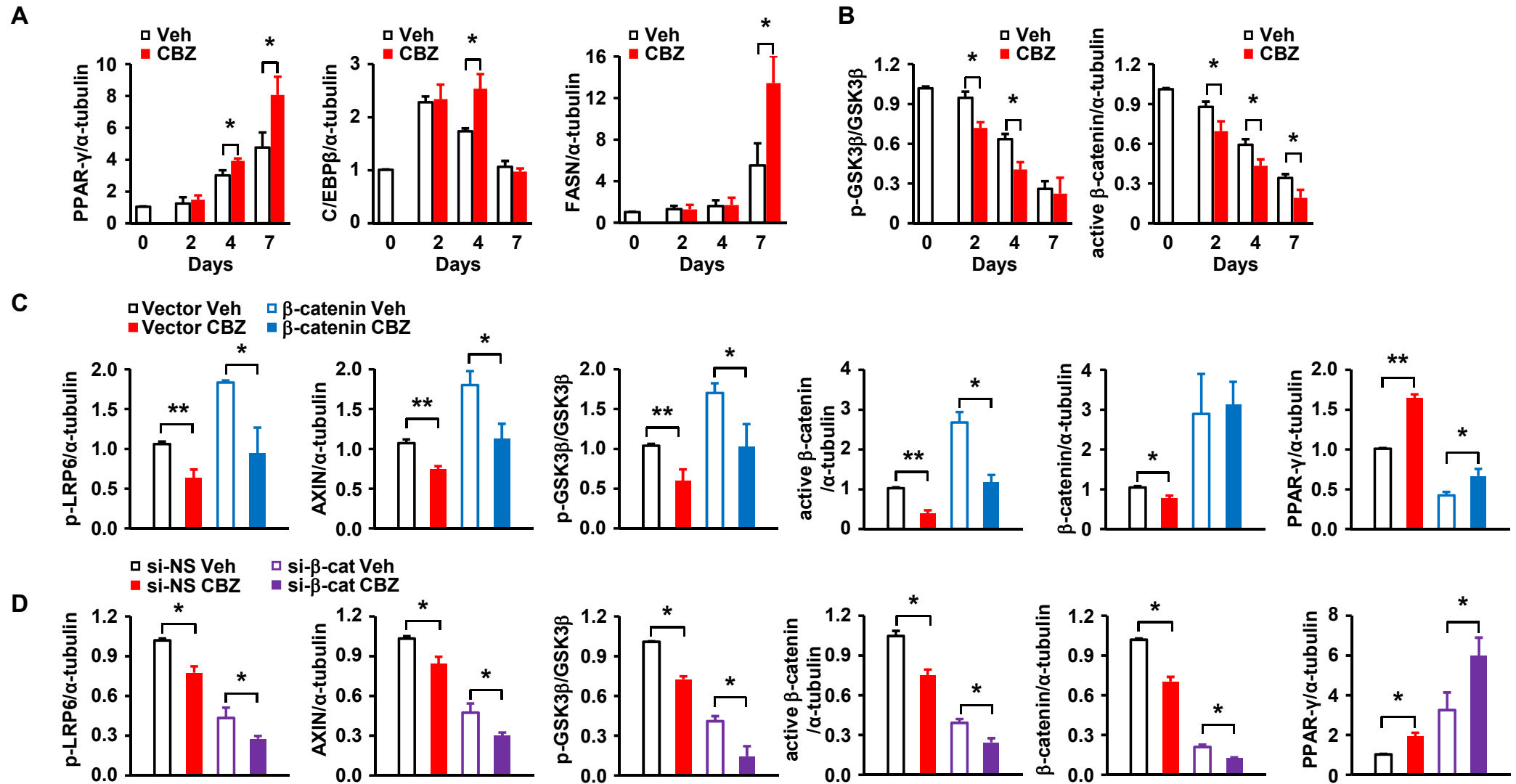


Figure S2. Quantification of western blot data.

Quantification of western blots from three independent experiments was performed using Image J software. Quantification analysis of (A) The relative levels of PPAR γ / α -tubulin, C/EBP β / α -tubulin and FASN/ α -tubulin in Figure 1E (n=3 per group). (B) The relative levels of p-GSK3 β /total GSK3 β and active β -catenin/ α -tubulin in Figure 3B (n=3 per group). (C) The relative levels of p-LRP6/ α -tubulin, AXIN/ α -tubulin, p-GSK3 β /total GSK3 β , active β -catenin/ α -tubulin, β -catenin/ α -tubulin and PPAR γ / α -tubulin in Figure 4C (n=3 per group). (D) The relative levels of p-LRP6/ α -tubulin, AXIN/ α -tubulin, p-GSK3 β /total GSK3 β , active β -catenin/ α -tubulin, β -catenin/ α -tubulin and PPAR γ / α -tubulin in Figure 5C (n=3 per group). *t*-test, Values are mean \pm SEM. *, *P* < 0.05; **, *P* < 0.01.

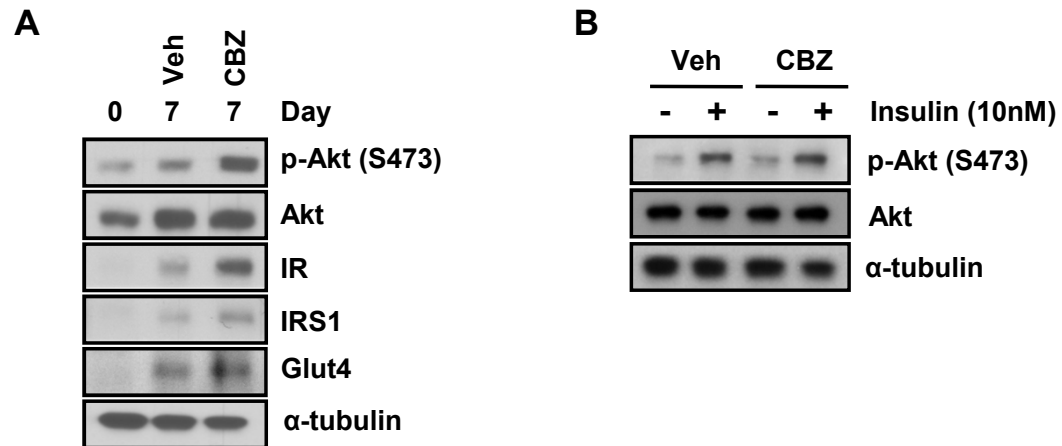


Figure S3. Carbamazepine does not affect insulin-induced Akt phosphorylation in differentiated adipocytes.

(A) Protein levels of insulin signaling after carbamazepine treatment during adipocyte differentiation. (B) Immunoblots showing insulin-induced phosphorylation of Akt in mature adipocytes after carbamazepine treatment for 30 min.