ONLINE APPENDIX

Figure S1. db/db mice and the lean control mice were injected with TUDCA (250mg/kg) or vehicle (saline) only, the body weight change were measured everyday 3 days. The body weight form 3 groups (lean saline, n=10; db/db saline, n=8; db/db TUDCA, n=8) were compared and analyzed

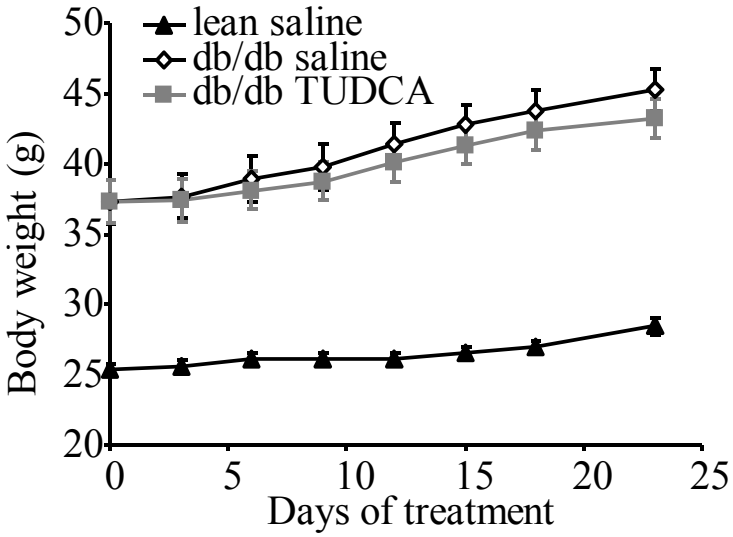


Figure S2. (A). C57/B6 mice fed with high fat diet for 5 months. Before sacrifice, the mice were injected with TUDCA (250mg/kg) or vehicle (saline) for 3 weeks. The expression levels of adiponectin, DsbA-L, CHOP, β-actin in white adipose tissue and adiponectin levels in serum were determined by western blot analysis with specific antibodies as indiated. The expression levels change of adiponectin in serum **(B)** and in white adipose tissue **(C)**, DsbA-L **(D)**, and CHOP **(E)** in white adipose tissue were quantified and normalized to β-actin levels. Data represent the mean ± SEM. n=3. *p<0.05, **p <0.01

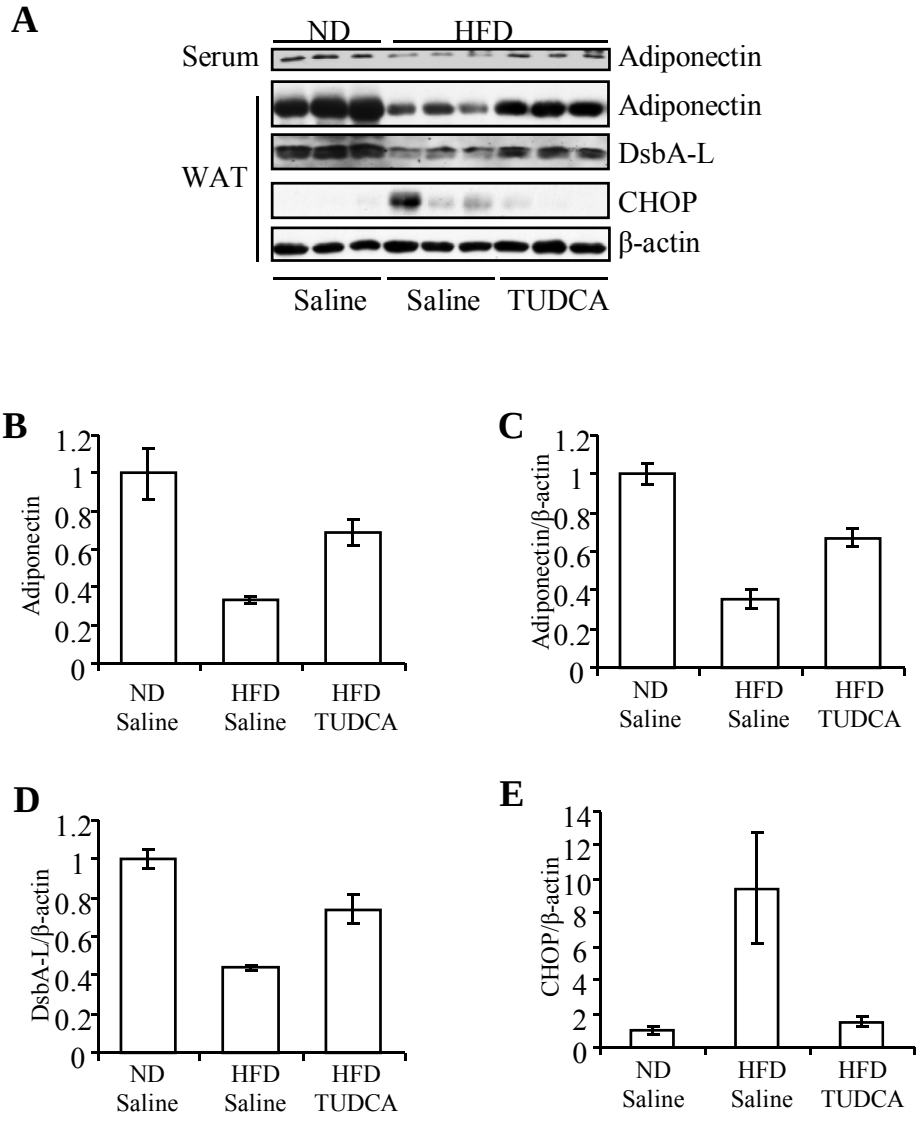
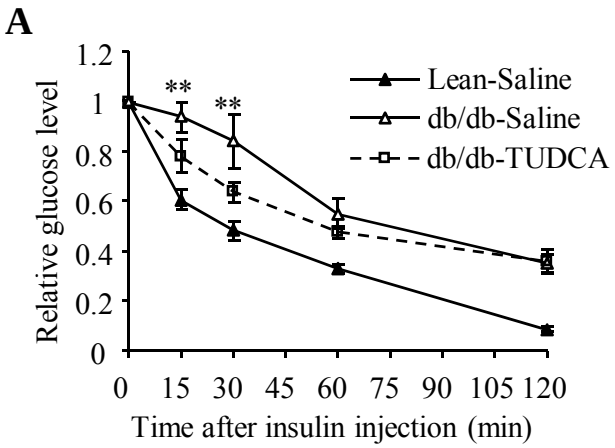


Figure S3. (A) Insulin (2 IU/kg) tolerance tests (ITT) of lean control mice with vehicle (saline) treatment and db/db mice treated with vehicle (saline) or TUDCA for 18 days. Data represent the mean ± SEM. n=5. **p <0.01 (TUDCA vs vehicle-treated db/db mice). **(B)** Glucose levels before insulin injection in ITT experiments. Data represent the mean ± SEM. n=5. **p <0.01, ***p<0.001



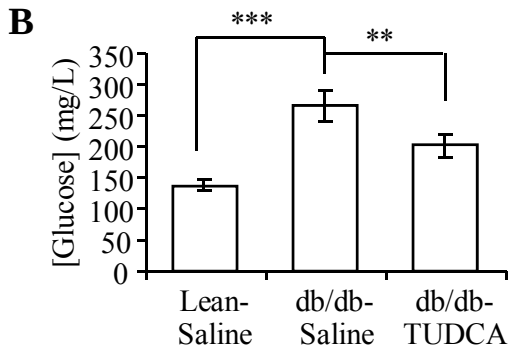


Figure S4. (A) C2C12 mytubes and **(B)** murine hepatocytes were pretreated with 1mM TUDCA for 24 hours and then lysed. The expression levels and phosphorylation levels of AMPK (thr^{172}) and ACC (ser^{79}) were determined by Western blot with specific antibodies as indicated. The data represents 3 independent experiments with similar results.