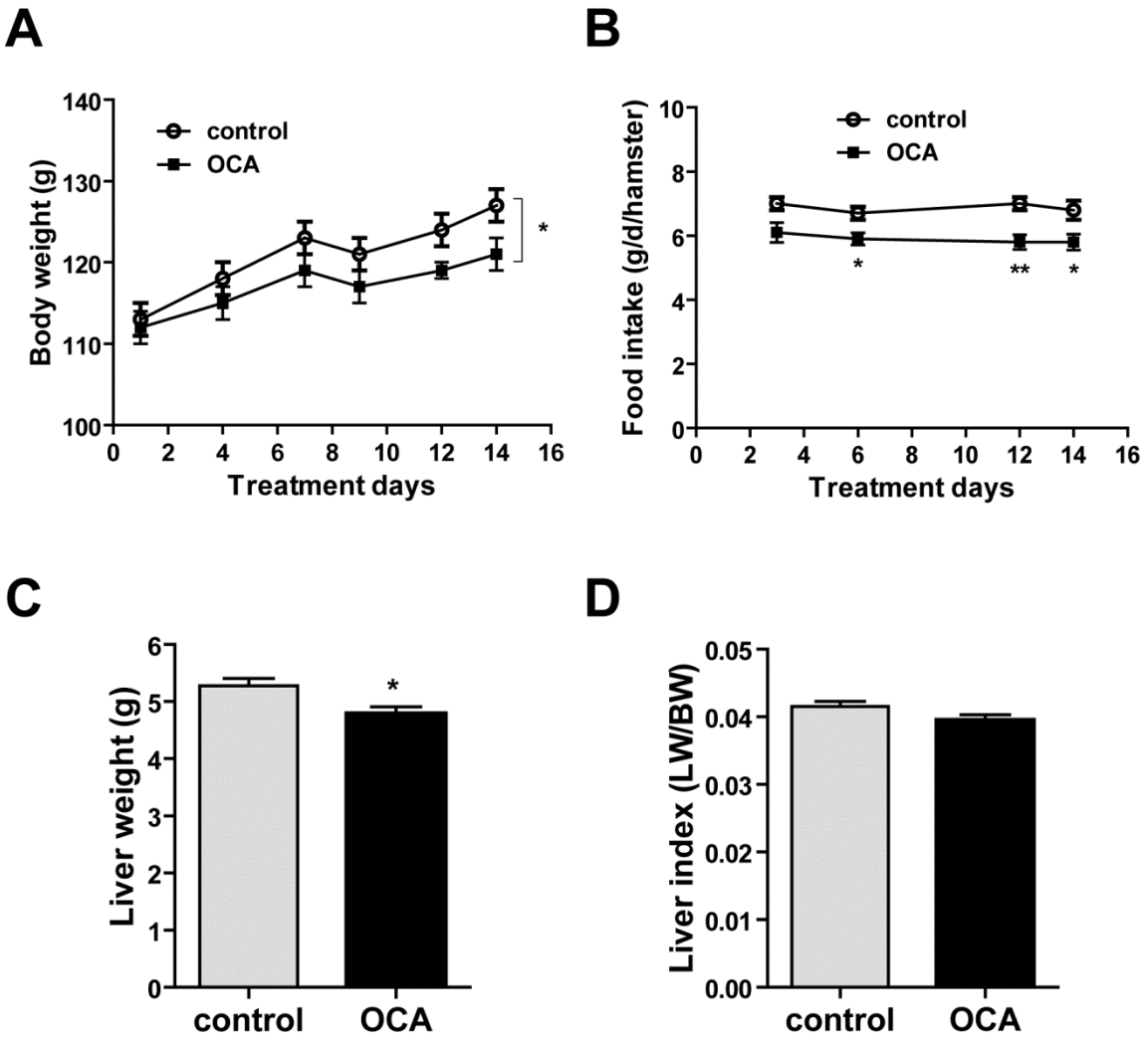
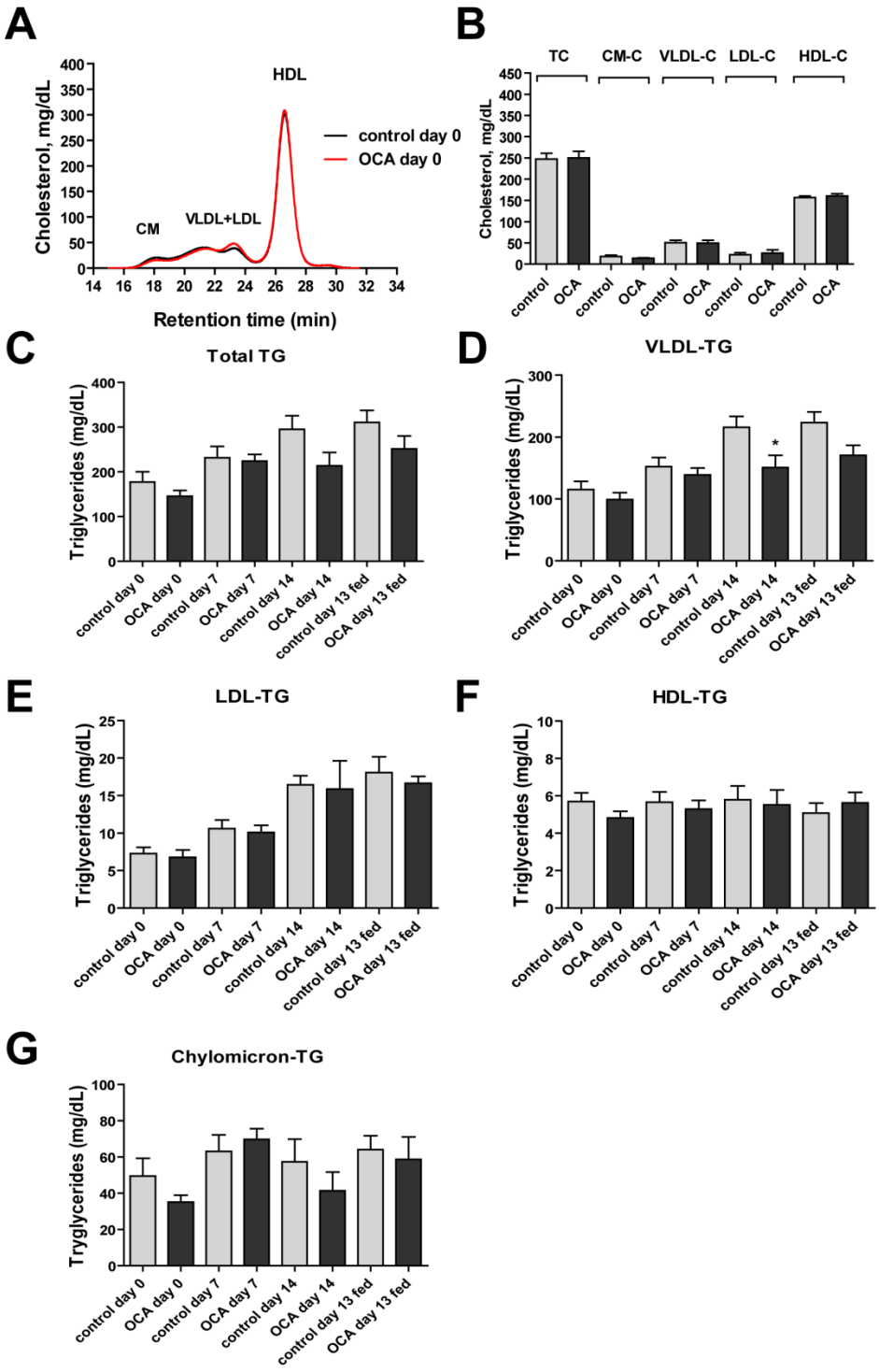
Supplemental figures

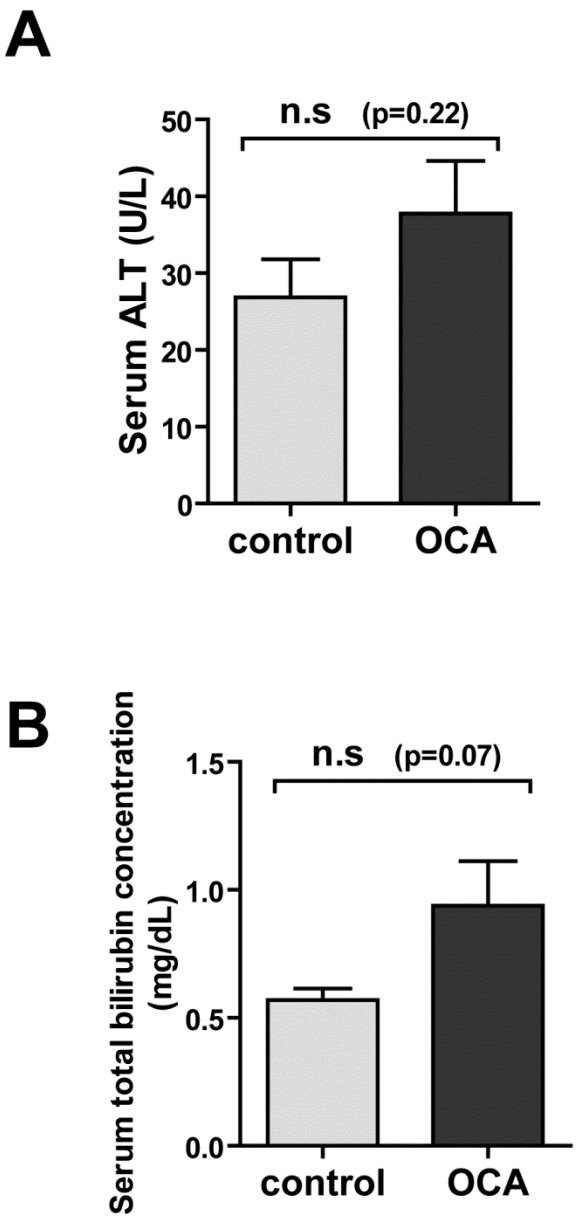


Supplemental Figure S1. Effects of OCA treatment on body weight, food intake, liver weight and liver index. Male hamsters fed a HFHCD for two weeks were treated by daily gavage with vehicle (n = 8) or 10 mg/kg OCA (n = 8) for 14 days. Body weight and food intake were recorded throughout the treatment duration. Hamsters were fasted for 16 h before euthanization for serum and liver tissue collections. Liver weight and body weight were measured.

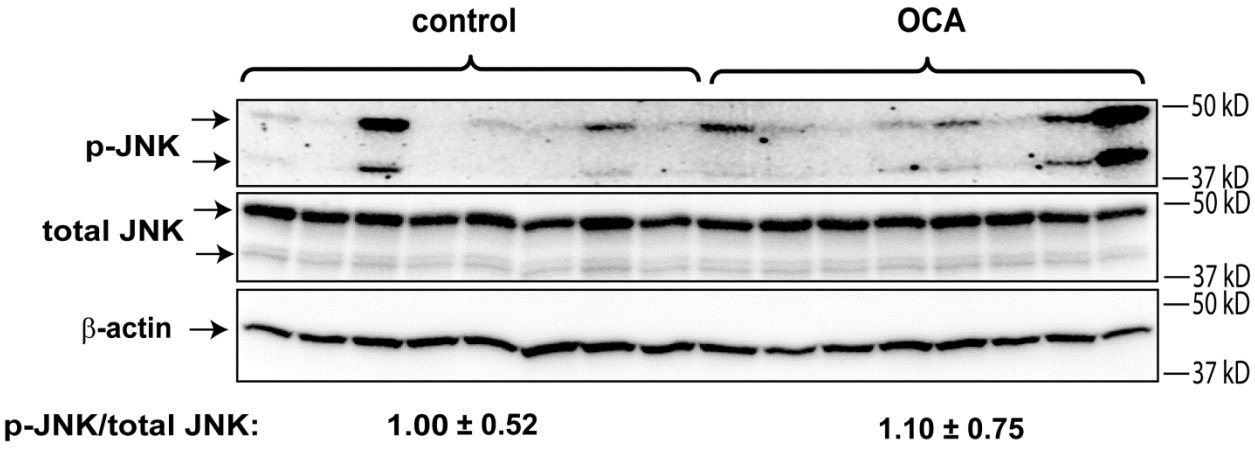
(A) Body weight measurement
(B) Food intake
(C) Liver weight
(D) Liver index



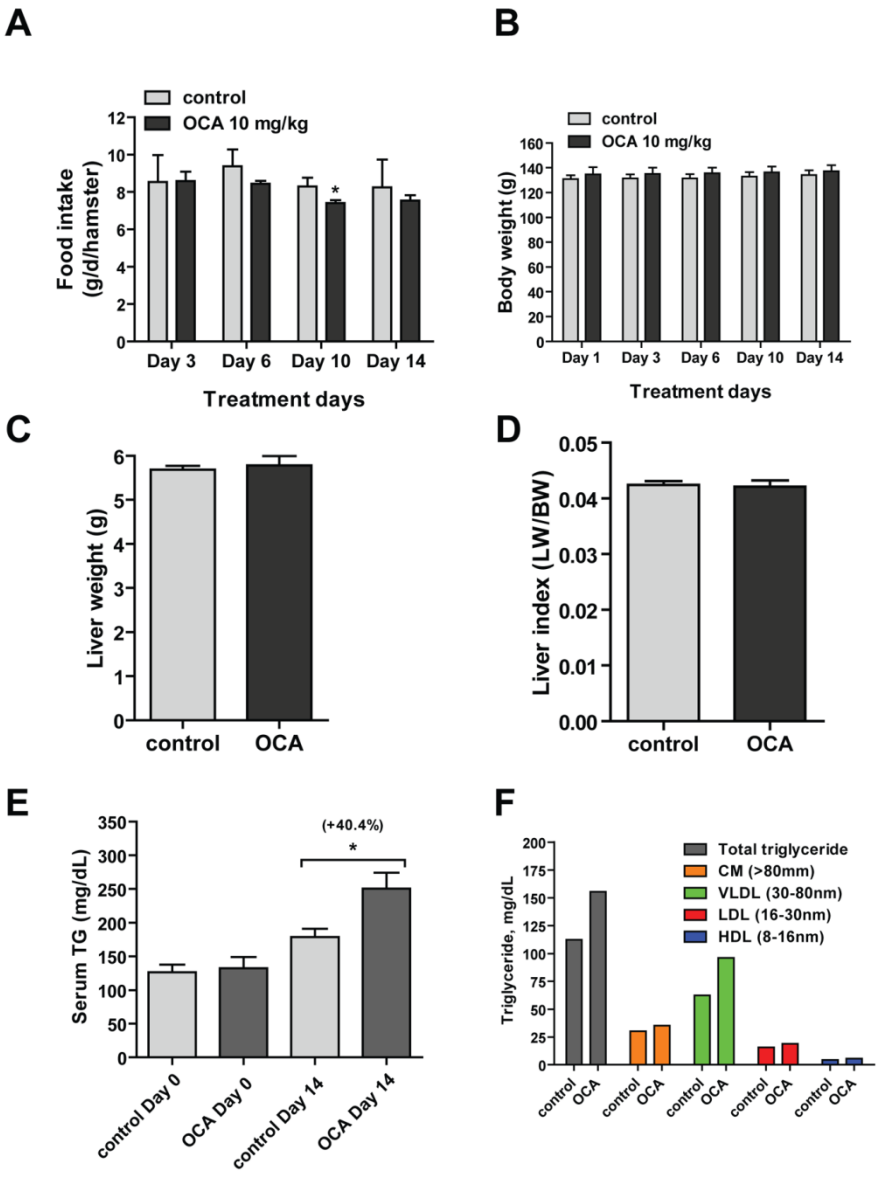
Supplemental Figure S2. Cholesterol (A-B) and triglycerides distributions (C-G) in HPLC-separated lipoprotein factions from hamsters on a HFHCD. A and B, Cholesterol distribution in HPLC-separated lipoprotein factions from hamsters on a HFHCD before OCA treatment (day 0); C, total TG; D, VLDL-TG; E, LDL-TG; F, HDL-TG and G, chylomicron-TG. All values are expressed as mean ± SEM. Significance is indicated as *, $p<0.05$ as compared to vehicle control group.



Supplemental Figure S3. OCA treatment did not significantly affect serum total bilirubin levels and ALT activity in hamsters fed a HFHCD. Male hamsters fed a HFHCD for two weeks were treated by daily gavage with vehicle (n = 8) or 10 mg/kg OCA (n = 8) for 14 days. Serum ALT activity (A) and total bilirubin levels (B) were measured at the end of treatment.



Supplemental Figure S4. Western blot analysis of p-JNK. Hamsters fed a HFHCD were sacrificed and liver tissues were isolated after 14 days of drug treatment. Individual liver homogenates were prepared and protein concentrations were determined. 50 μg of homogenate proteins per liver sample were resolved by SDS-PAGE. P-JNK and JNK proteins were detected by immunoblotting using anti-p-JNK and anti-JNK antibodies. The membrane was reprobed with anti-β-actin antibody.



Supplemental Figure S5. Effects of OCA treatment on body weight, food intake and serum triglycerides levels of hamsters fed a normal chow diet (NCD). Male hamsters fed a NCD were treated by daily gavage with vehicle (n = 6) or 10 mg/kg OCA (n = 6) for 14 days. Body weight and food intake were recorded throughout the treatment duration. Hamsters were fasted for 4 h before euthanization for serum and liver tissue collections.

(A) Food intake

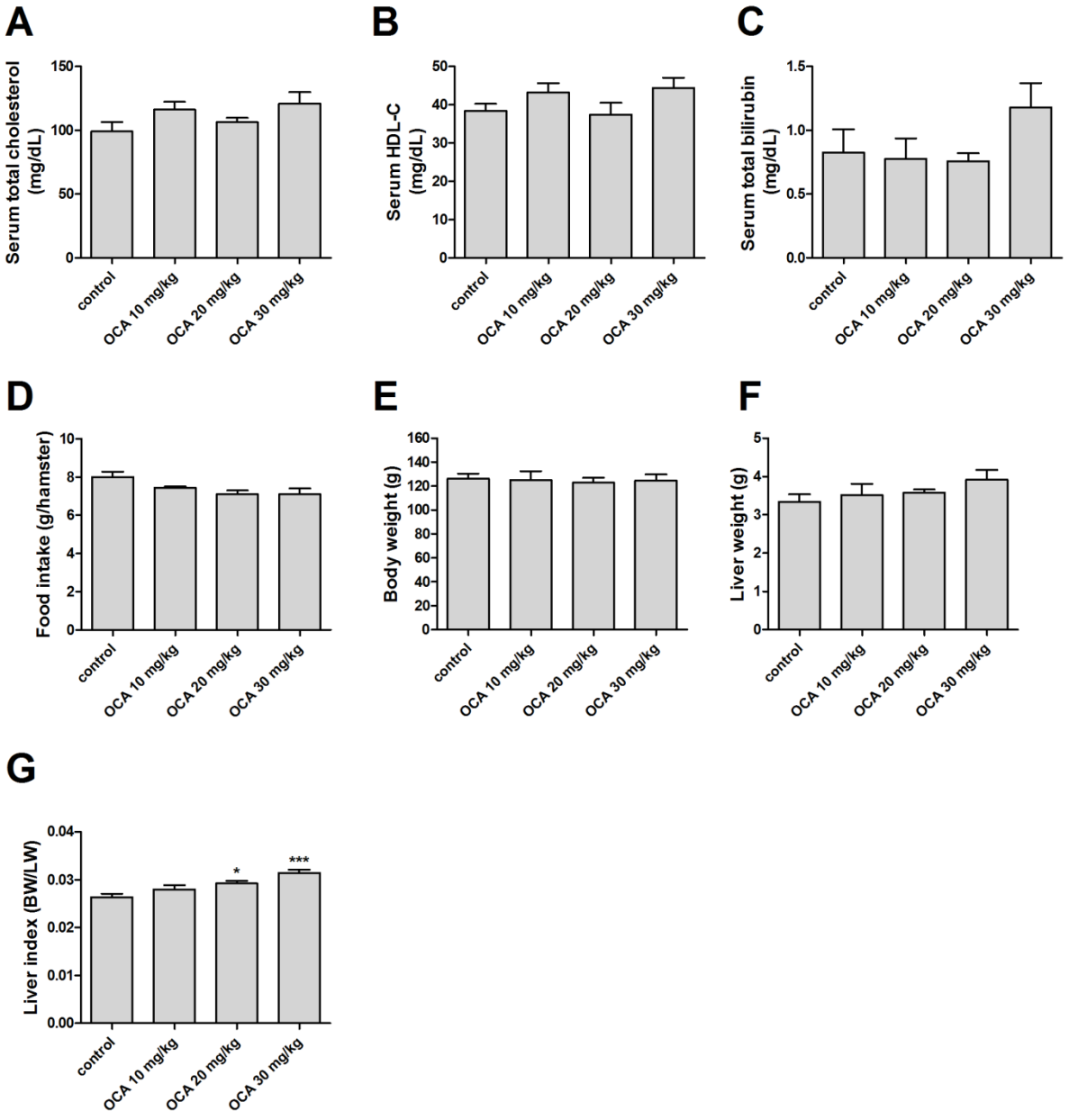
(B) Body weight measurement

(C) Liver weight

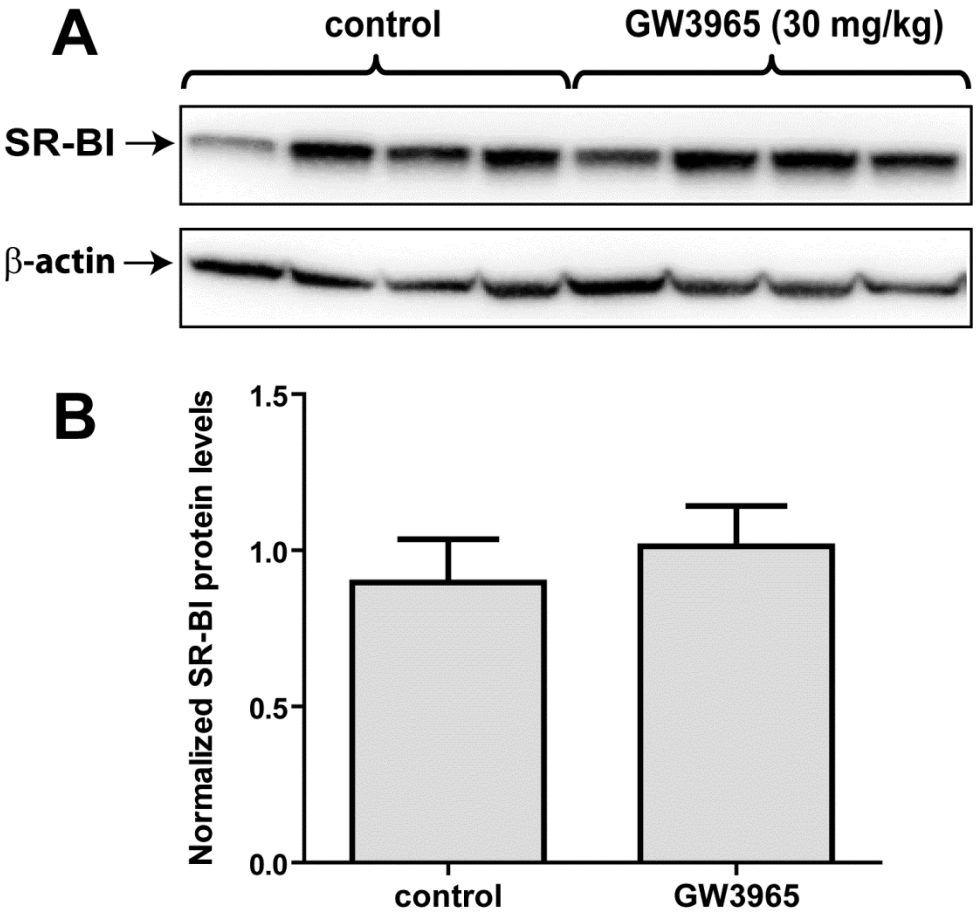
(D) Liver index

(E) Serum TG levels

(F) Pooled serum samples of vehicle and OCA were separated by HPLC and triglycerides levels in different lipoprotein fractions were measured.



Supplemental Figure S6. Examination of dose-dependent effects of OCA treatment of three days on serum cholesterol levels and health parameters of hamsters fed a NCD. Male hamsters fed a NCD were treated by daily gavage with vehicle (n = 5) or 10 mg/kg OCA (n = 5), 20 mg/kg OCA (n = 5) or 30 mg/kg OCA (n = 5) for 3 days. Hamsters were fasted for 16 h before euthanization for serum and liver tissue collections. At the end of treatment, fasting serum samples were measured for TC, HDL-C, and total bilirubin levels.



Supplemental Figure S7. LXR activation did not affect hepatic SR-BI protein expression in hamsters treated with GW3965.

Sixteen hamsters fed a NCD were either treated with 30 mg/kg of GW3965 for 7 days or with vehicle for 7 days. Hamsters were sacrificed and liver tissues were isolated at the end of treatment. Total protein extracts were individually prepared from 4 randomly chosen liver samples of each group. Equal amounts of homogenate proteins (50 μg) were resolved by SDS-PAGE and SR-BI and β-actin proteins were separately detected by immunoblotting using anti-SR-BI antibody or anti-β-actin antibody.