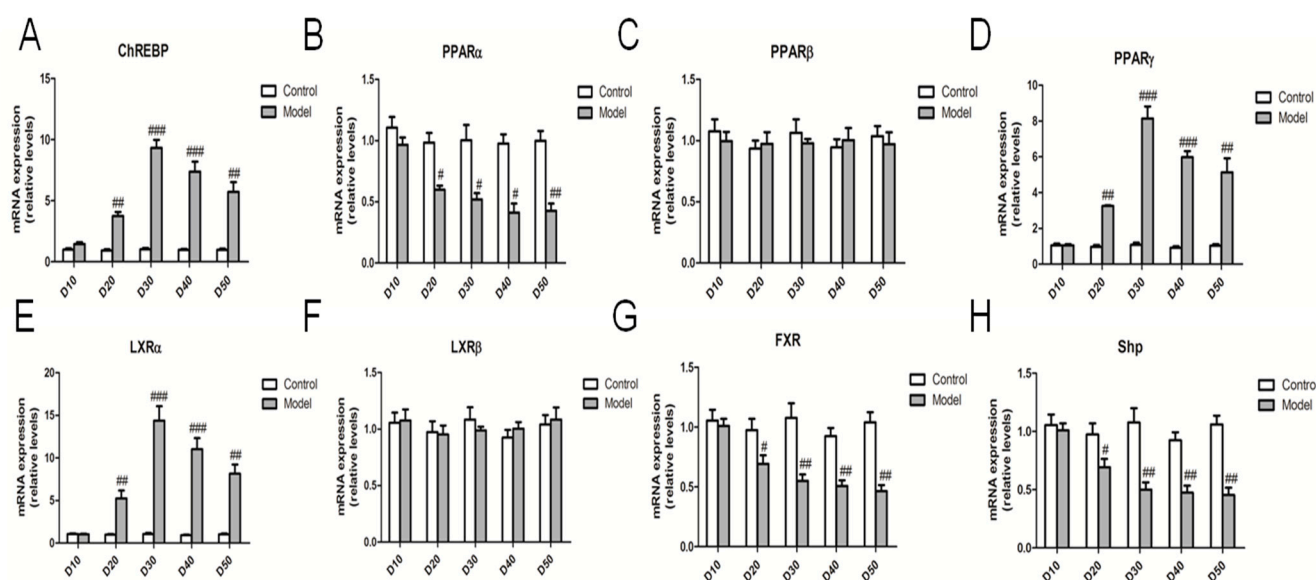
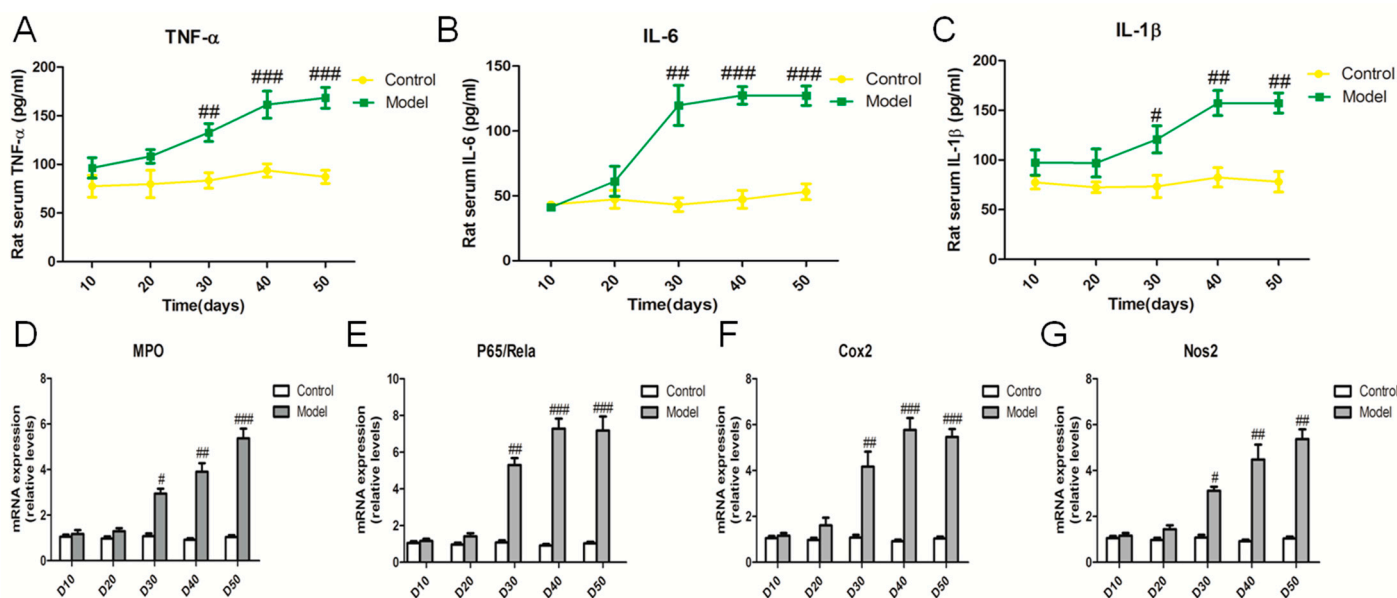




**Figure S1.** Effect of high fat and high sucrose diet on hepatic lipid metabolism in SD rats. The hepatic lipid metabolism parameters of SD rats induced by high fat and high sucrose diet for 10, 20, 30, 40, 50 days. The mRNA gene expression for ChREBP (A), PPAR $\alpha$  (B), PPAR $\beta$  (C), PPAR $\gamma$  (D), LXR $\alpha$  (E), LXR $\beta$  (F), FXR (G), Shp (H). The values are expressed as the means  $\pm$  SEM (n = 6). Compared with the corresponding control group, #  $p < 0.05$ , ##  $p < 0.01$ , ###  $p < 0.001$ .



**Figure S2.** Effect of high fat and high sucrose diet on inflammation factor in SD rats. The system inflammation parameters of SD rats induced by high fat and high sucrose diet for 10, 20, 30, 40, 50 days. The serum inflammation factors for TNF- $\alpha$  (A), IL-6 (B), IL-1 $\beta$  (C). The hepatic inflammation factors for MPO (D), P65/Rela (E), Cox2 (F), Nos2 (G). The values are expressed as the means  $\pm$  SEM (n = 6). Compared with the corresponding control group, #  $p < 0.05$ , ##  $p < 0.01$ , ###  $p < 0.001$ .

**Table S1. Primers used for quantitative real-time polymerase chain reaction.**

| Gene            | Forward primer            | Reverse primer            | NCBI GeneBank  |
|-----------------|---------------------------|---------------------------|----------------|
|                 | (5'-3')                   | (5'-3')                   |                |
| PPAR $\gamma$ 2 | CAGGTTTGGGCGAATG          | TTTGGTCAGCGGGAAG          | NM_001145366.1 |
| SREBP1c         | GGAGCCATGGATTGCACATT      | GCTTCCAGAGAGGAGCCCAG      | NM_001276708.1 |
| FAS             | CAACATTGACGCCAGTTCCG      | TTCGAGCCAGTGTCTTCCAC      | NM_017332.1    |
| TNF- $\alpha$   | CACCATGAGCACGGAAAGCATGA   | CGCCTCACAGAGCAATGACTCCA   | NM_012675.3    |
| IL-6            | CACTTCACAAGTCGGAGGCT      | AGCACACTAGGTTTGCCGAG      | NM_012589.2    |
| MCP-1           | GATCCCAATGAGTCGGCTGG      | ACAGAAGTGCTTGAGGTGGTT     | NM_031530.1    |
| TGF- $\beta$ 1  | CTTTGTACAACAGCACCCGC      | TAGATTGCGTTGTTGCGGTC      | NM_021578.2    |
| $\alpha$ -SMA   | CCCTGAAGTATCCGATAGAACA    | TGCCTGGGTACATGGTAGTG      | NM_031004.2    |
| MMP-13          | GTGACTCTTGCGGGAATCCT      | CAGGCACTCCACATCTTGGT      | NM_133530.1    |
| CAT             | GAGGCAGTGTACTGCAAGTTCC    | GGGACAGTTCACAGGTATCTGC    | NM_012520.2    |
| GPx1            | TCCACCGTGTATGCCTTCTCC     | CCTGCTGTATCTGCGCACTGGA    | NM_030826.3    |
| GAPDH           | CCTTCATTGACCTCAACTACATGGT | TCATTGTCATACCAGGAAATGAGCT | NM_017008.4    |
| Mlxip1          | CGGGGTCGTGTAGACAACAA      | CTGACAAGTCCGTGCAGAGT      | NM_133552.1    |
| PPAR $\alpha$   | GCATGGCTGAGAAGACGCTTG     | GGATAGCCTTGGCAAATTCCG     | NM_013196.1    |
| PPAR $\beta$    | AGCAGCCTCTTCCTCAACGAC     | AACTTGGGCTCAATGATGTCAC    | NM_013141.2    |
| PPAR $\gamma$   | GAAGCCCTTTGGTGACTTTATG    | AGGTTGCTCTGGATGTCTCGA     | NM_013124.3    |
| LXR $\alpha$    | GGAGCACGCTACATTTGCCATA    | CCTCTTCTTGACGCTTCAGTTTC   | NM_031627.2    |
| LXR $\beta$     | AGACGCTACAACCACGAGAC      | CCGCTTGATCCTCGTGTAGG      | NM_031626.1    |
| FXR             | GCCCACTGAGAGTGTGTACC      | TCCCATCTCTCTGCACTTCC      | NM_021745.1    |
| Shp             | TGATGGCTCCCAAACCTCC       | AGGAATTCTGCCCTGAAGCA      | NM_057133.1    |
| Rela /P65       | CATGGATCCCTGCACACCTT      | CTCAGCATGGAGAGTTGGCA      | NM_199267.2    |
| Cox2            | TGTGAAAGGGTGTCCCTTCG      | AGTACAACACAGGAATCTTCACA   | S67722.1       |
| Nos2            | GGTGAGGGGACTGGACTTTTAG    | TTGTTGGGCTGGGAATAGCA      | NM_012611.3    |