In *vitro* studies:

Cell culture and stimulation.

The AML12 cells (ATCC® CRL-2254™) grown in DMEM/F-12 medium containing 10% (v/v) fetal bovine serum, 5 mg/mL insulin, 5 μg/mL transferrin, 5 ng/mL selenium, 40 ng/mL dexamethasone, 100 U/mL penicillin, 100 μg/mL streptomycin, and 2 mmol/L glutamine, in a humidified incubator at 37 ℃ in a 5% CO_2 atmosphere. The medium was changed every two days until the cells reached 80% confluence. The AML12 cells were treated with 100 ng/mL LPS and 1 mM NAC for 1 h.

Measurement of TG.

Intracellular lipids deposition was determined by the measurement of TG. For intracellular TG detection, cells were collected and lysed. The contents of TG and protein in lysate were determined by TG assay kit (Applygen, Beijing, China) and BCA kit (Beyotime, Shanghai, China) respectively, according to the manufacturer's instructions.

Quantitative real-time polymerase chain reaction (qRT-PCR).

RNA was extracted from AML12 cells using TRIzol reagent (Invitrogen, Carlsbad), according to the manufacturer's protocol. Synthesized primers and their sequences are the same as *vivo*.