

Figure S1. IL-37 inhibits mouse bone marrow derived macrophages ferroptosis. The mouse bone marrow derived macrophages were divided into three groups: i) CTRL group; ii) HG/ox-LDL group: The macrophages were treated with 100 ng/ml ox-LDL and 25 mM glucose for 24 h; and iii) IL-37 group: 30  $\mu$ M IL-37 for 0.5 h, 100 ng/ml ox-LDL, 25 mM glucose for 24 h. (A) Cell Counting Kit-8 assay. (B and C) Western blotting was used to analyze the protein level of GPX4. (D) GSH level in different groups. (E) MDA level in different groups. (F) SOD level in different group. \*P<0.05 vs. control group and #P<0.05 vs. HG/ox-LDL. Each dot represents a biological repetition. HG, high glucose; GPX4, glutathione peroxidase 4; GSH, reduced glutathione; MDA, malondialdehyde; SOD, superoxide dismutase.

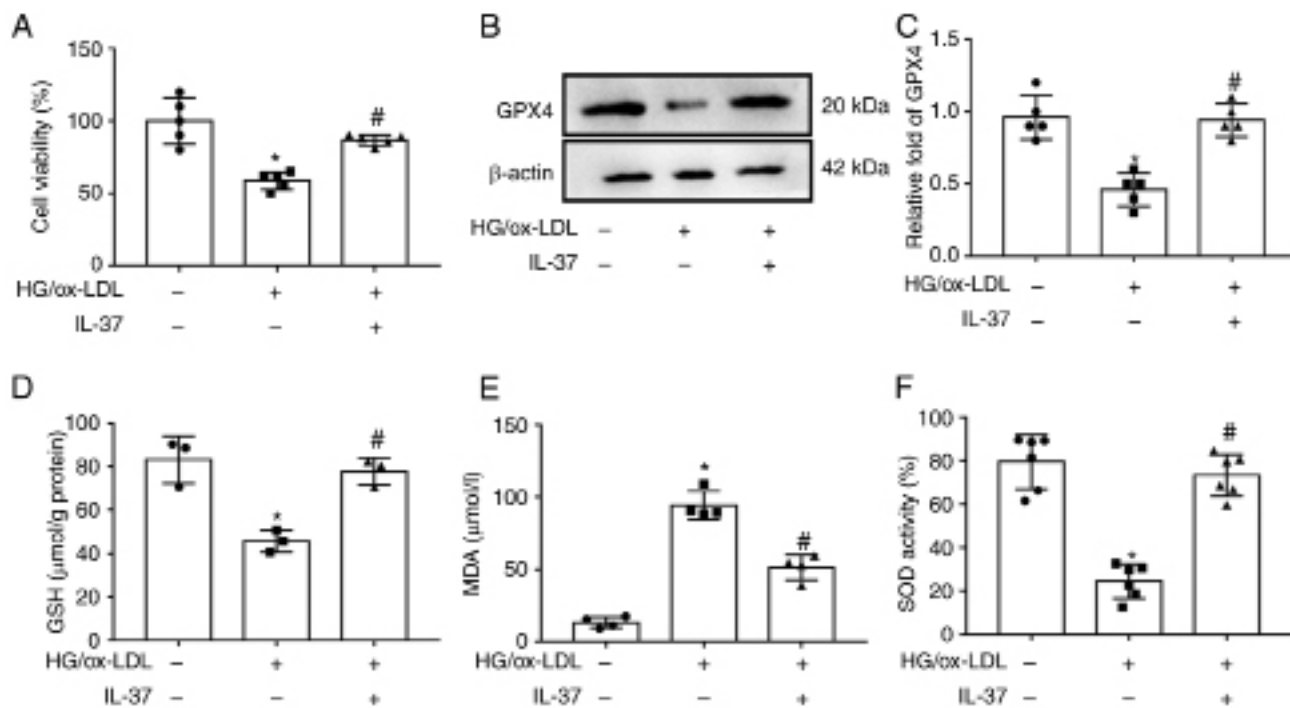


Figure S2. ML385 inhibits NRF2 nuclear translocation induced by IL-37. The mouse bone marrow-derived macrophages were divided into four groups: i) CTRL group; ii) HG/ox-LDL group: The macrophages were treated with 100 ng/ml ox-LDL and 25 mM glucose for 24 h; iii) IL-37 group: 30  $\mu$ M IL-37 for 0.5 h, 100 ng/ml ox-LDL, 25 mM glucose for 24 h and iv) ML385 group: 5  $\mu$ M ML385 for 0.5 h, 30  $\mu$ M IL-37 for 0.5 h, 100 ng/ml ox-LDL, 25 mM glucose for 24 h. (A and B) Macrophage nuclear proteins were extracted and western blotting was used to evaluate the level of NRF2 in the nucleus. \*P<0.05 vs. control group, #P<0.05 vs. HG/ox-LDL and \$P<0.05 vs. IL-37/HG/ox-LDL. Each dot represents a biological repetition. NRF2, nuclear factor erythroid 2-related factor 2; HG, high glucose.

