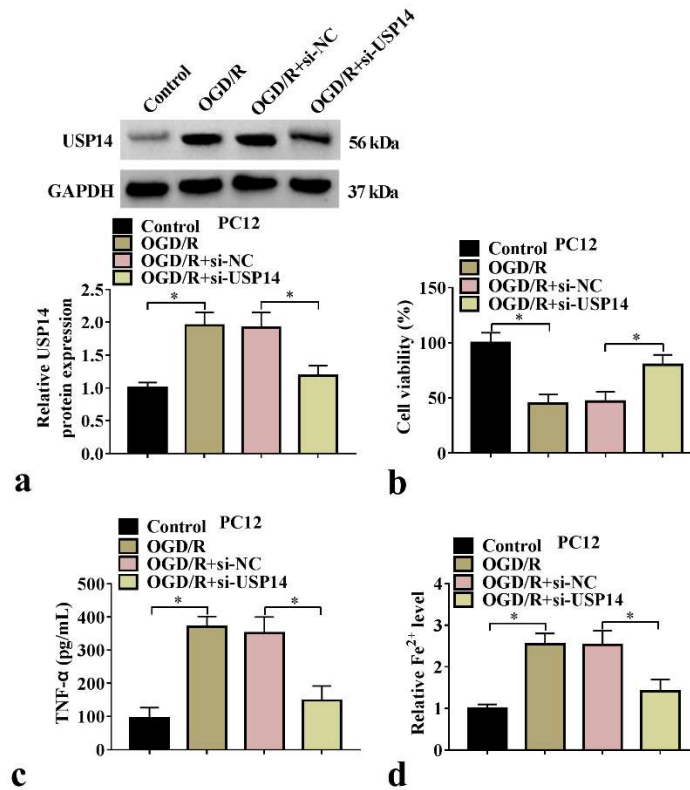
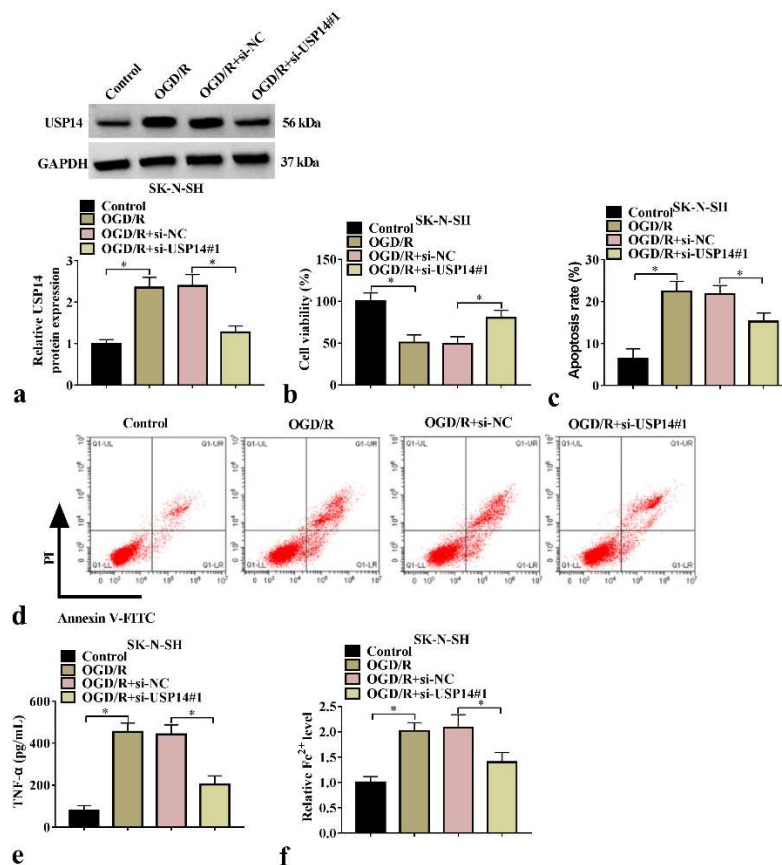


Supplementary Figures



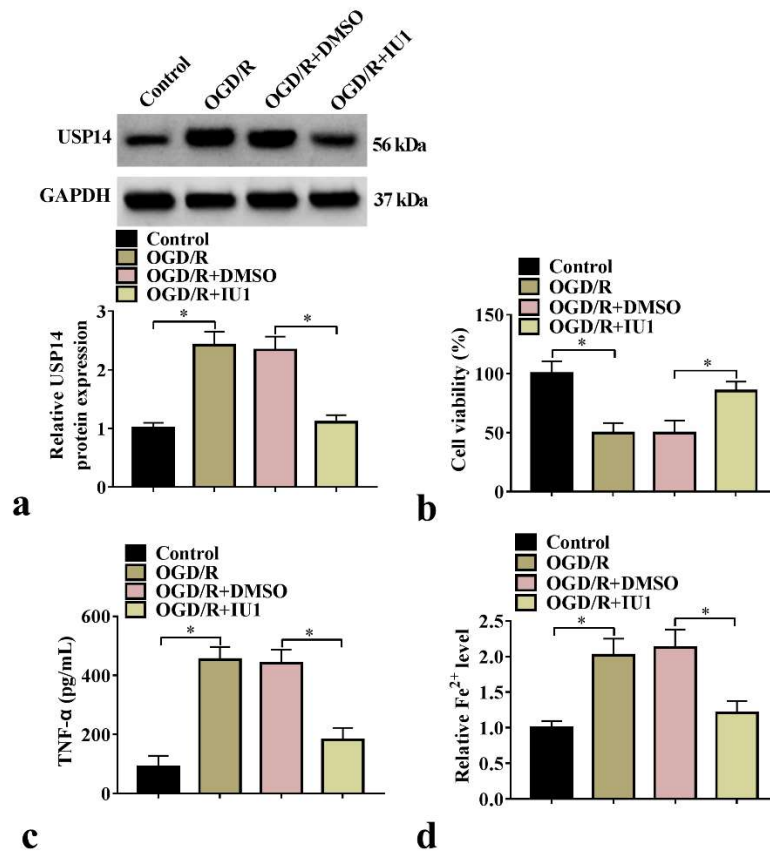
Supplementary Figure 1: Effect of si-USP14 on PC12 cell injury. (a) WB analysis for USP14 protein expression ($n=3$). (b) Cell viability was examined by CCK8 ($n=3$). (c) ELISA was used in testing TNF- α level ($n=3$). (d) Fe²⁺ level was measured ($n=3$). USP14, ubiquitin-specific peptidase 14. * $P<0.05$. USP14: Ubiquitin-specific peptidase 14, CCK8: Cell counting kit 8, ELISA: Enzyme-linked immunosorbent assay, WB: Western blot, TNF- α : Tumor necrosis factor-alpha.



Supplementary Figure 2: Effect of si-USP14#1 on SK-N-SH cell injury. (a) USP14 protein expression was tested with WB ($n=3$). (b) Cell viability was detected using CCK8 ($n=3$). (c and d) Flow cytometry for measuring cell apoptosis rate ($n=3$). (e) TNF- α level was detected by ELISA ($n=3$). (f) Fe²⁺ level was detected ($n=3$). USP14, ubiquitin-specific peptidase 14. * $P<0.05$.

USP14: Ubiquitin-specific peptidase 14, CCK8: Cell counting kit 8, WB: Western blot, ELISA:

Enzyme-linked immunosorbent assay, TNF- α : Tumor necrosis factor-alpha.



Supplementary Figure 3: Effect of IU1 on SK-N-SH cell injury. (a) USP14 protein expression was examined by WB ($n=3$). (b) Cell viability was assessed by CCK8 ($n=3$). (c) TNF- α level was detected using ELISA ($n=3$). (d) Fe²⁺ level was evaluated ($n=3$). * $P<0.05$. USP14: Ubiquitin-specific peptidase 14, WB: Western blot, TNF- α : Tumor necrosis factor-alpha, ELISA: Enzyme-linked immunosorbent assay.