

SUPPLEMENTARY METHODS

Mitochondrial ROS assay

Cells, seeded in 6-hole plate, were incubated with 1.0 ml of 5 μ M solution of MitoSOXred (ThermoFisher Scientific, USA) for 10 min at 37 °C in the dark and washed with PBS. Then, stained with DAPI and analysed using a fluorescence microscope.

Analysis of antioxidant substances

Cells were homogenized by ultrasonic vibration and centrifuged for 12000 rpm/min, 10 min, the supernatant

was collected, and the levels of superoxide dismutase (SOD), catalase (CAT), and glutathione (GSH) were measured according to the manufacturer's instructions (Jiancheng biotech, Nanjing, Jiangsu, China).