Figure S1. Cytotoxicity of Rot for SH-SY5Y cells. Effect of Rot treatment ($0.3 \mu M$) for 6-48 h on the viability of SH-SY5Y cells assessed by the CCK-8 assay. Rot, rotenone; CCK-8, Cell Counting Kit-8; ns, not significant.

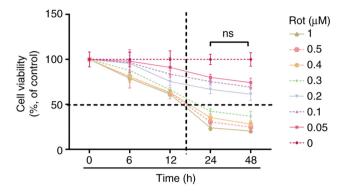


Figure S2. Determination of nontoxic concentrations of ginsenoside monomers (A) Rg1, (B) Rg2, (C) Rg3, and (D) Rh2 following treatment of SH-SY5Y cells for 6-48 h assessed by the CCK-8 assay. Data are expressed as the mean \pm SD, n=3. CCK-8, Cell Counting Kit-8; ns, not significant.

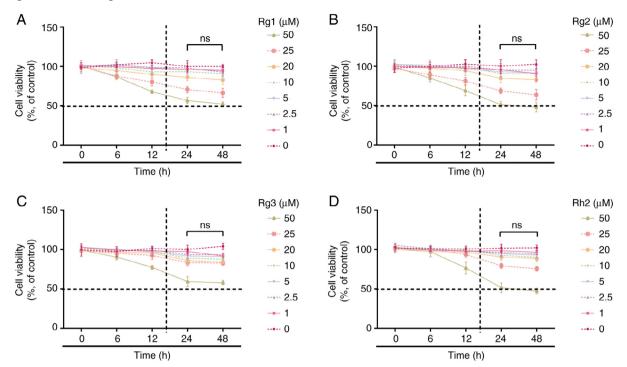


Figure S3. Effects of SH-SY5Y treatment with (A) Re (1-50 μ M) alone, (B) Re and Rot together, (C) optimal concentrations of five ginsenoside monomers, (D) or Rot ± Re and l-dopamine for 6-48 h assessed by CCK-8 assay. Data are expressed as the mean ± SD, n=3. Re, ginsenoside Re; Rot, rotenone; CCK-8, Cell Counting Kit-8; l-dopa, l-dopamine; ns, not significant.

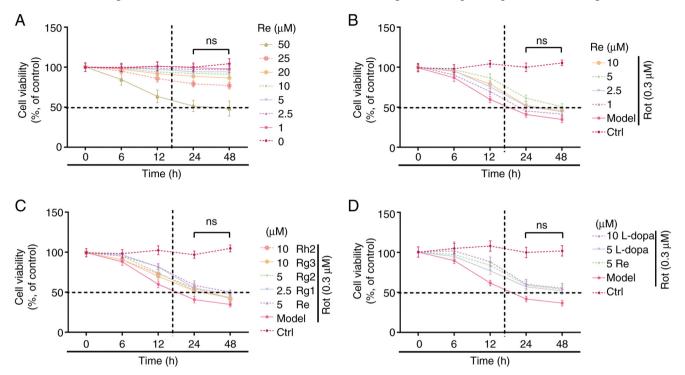


Figure S4. Effect of (A) Rg1, (B) Rg2, (C) Rg3, and (D) Rh2 on the viability of SH-SY5Y cells after treatment with Rot for 6-48 h assessed by CCK-8 assay. Data are expressed as the mean \pm SD, n=3. Rot, rotenone; CCK-8, Cell Counting Kit-8; ns, not significant.

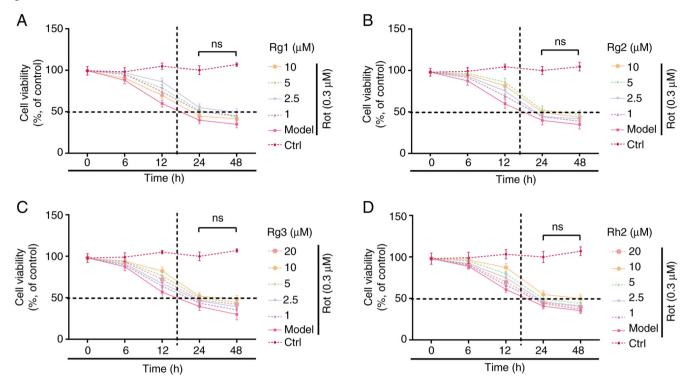


Figure S5. Re-induced Nrf2 accumulation is mediated by PI3K/AKT. (A) Cell viability assessed by CCK-8 assay. (B) Quantification of ROS levels assessed by DCFH-DA assay and detected by fluorescence microplate reader. The excitation wavelength was 488 nm, and the emission wavelength was 530 nm. (C) Western blot analysis of nuclear Nrf2 protein levels. Cells were pretreated with 5μ M AKT inhibitor IV for 1 h and then treated with 0.3 μ M Rot and 5μ M Re for 24 h. Data are presented as the mean \pm SD, n=3. *P<0.05, **P<0.01 and ***P<0.001 vs. the control; #P<0.05 vs. Rot treatment alone; &P<0.05 vs. Re + Rot treatment. Re, ginsenoside Re; Nrf2, nuclear factor erythroid 2-related factor 2; PI3K, phosphatidylinositol 3-kinase; AKT, protein kinase B; CCK-8, Cell Counting Kit-8; ROS, reactive oxygen species; DCFH-DA, 2,7-dichlorofluorescein diacetate; Rot, rotenone.

