

Data S1. Materials and methods

Luciferase-labeled cells. The chemiluminescence intensities of SH-SY5Y cells before and after transfection with luciferin were assessed using a full function microhole plate detector. The intensity was significantly higher in the cells transfected with luciferin than in those not transfected with luciferin

($P < 0.01$; Fig. S1). This result indicated that the level of cell proliferation was unchanged after luciferase transfection. The proliferation of the Luc-SH-SY5Y and the SH-SY5Y cells transfected with the luciferase gene was detected using a CCK8 assay. The proliferation curves were the same between the cells, indicating that the cell proliferation characteristics were not affected by luciferase transfection.

Figure S1. Comparison of chemiluminescence intensity before and after transfection of cells. (A) Chemiluminescence intensity of SH-SY5Y cells transfected with luciferin and without luciferin was assessed using a full-function micro-hole plate detector. Luciferin-transfected cells had a higher intensity vs. cells without transfection. Chemiluminescence intensity values are shown as mean \pm SD from three independent experiments. (B) Growth curves of SH-SY5Y and Luc-SH-SY5Y cells were not significantly different. **P<0.01.

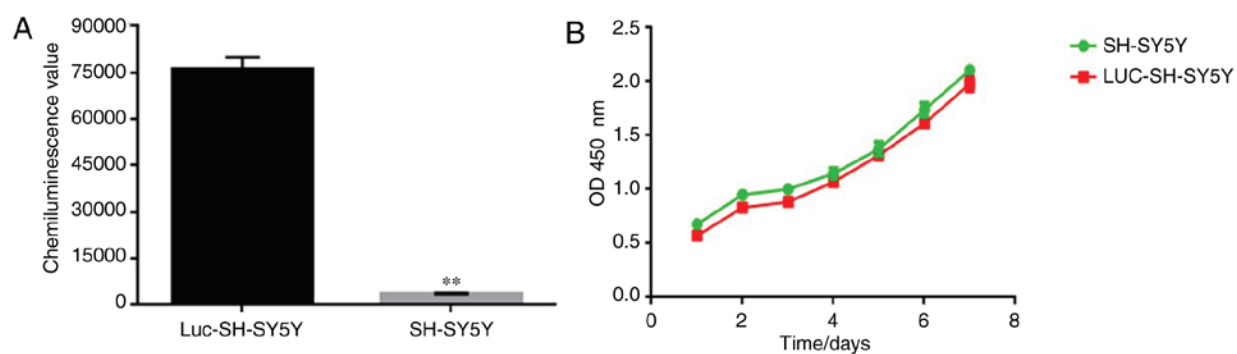


Figure S2. Body weight changes of nude mice in each group. There was no significant difference in body weight of nude mice in each group. CTX, cyclophosphamide; ISA, isatin.

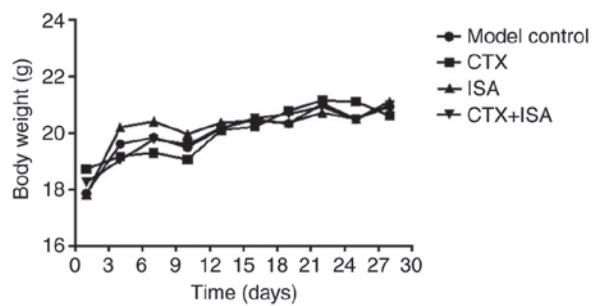


Table SI. Cell survival rate after treatment with different concentrations of isatin at different time points.

Isatin concentration, $\mu\text{mol/l}$	Cell survival rate, %	
	48 h	72 h
0	100.00	100.00
25	92.96	85.65
50	81.25	74.88
100	76.78	51.22
200	70.43	44.95
300	55.60	41.40
400	47.21	35.68
500	29.33	22.35
800	18.00	2.25

Table SII. Primer sequences.

Name	Sequences
GAPDH-F	5'-AGAAGGCTGGGGCTCATTTG-3'
GAPDH-R	5'-AGGGGCCATCCACAGTCTTC-3'
LSD1-F	5'-GTGTCTCGTTGGCGTGCT-3'
LSD1-R	5'-CCCGCAAAGAAGAGTCGTG-3'
P53-F	5'-ATTT'GCGTGGTGGAGTATTTG-3'
P53-R	5'-GGAAGAAGAAGTGGTGAATG-3'

F, forward; R, reverse; LSD1, lysine-specific histone demethylase.