Figure S1. JP3 increases DNA damage in DDP-resistant GC cells by down regulating CK2α expression and competitively inhibiting the interaction between CK2α and XRCC1. (A) BGC823/DDP cells were treated with DMSO, 5 µg/ml DDP, 50 µM JP3 or DDP+JP3 for 24 h and γ-H2AX foci staining was quantized by Image J. (B) BGC823/DDP cells were treated with DMSO or 50 µM JP3 for 24 h and with or without 10 µM MG132 for 6 h. CK2α protein stability was determined by western blot; GAPDH was used as the loading control. (C) SGC7901/DDP cells were pretreated with DDP or DDP+JP3 for 24 h, and the endogenous protein-protein interaction between CK2α and XRCC1 was determined by co-IP with XRCC1 antibodies followed by western blot confirmation.

Figure S2. JP3 attenuates DDP-induced DNA damage in normal cells by reducing ROS. (A) GES-1 cells were treated with DMSO, 5 μg/ml DDP, 50 μM JP3 or DDP+JP3 for 24 h; the immunofluorescence staining of 8-OHdG (Figure 4 A, red) was quantized by Image J. (B) GES-1 and HEK 293T cells were treated with DMSO, 5 μg/ml DDP, 50 μM JP3 or DDP+JP3 for 24 h; the numbers of DCFH-DA positive cells (Figure 4B) were calculated. (C) The content of intracellular activity of SOD was measured by related commercial kits.

Table S1. Results of serum biochemical parameters of BGC823/DDP cell xenograft model mice

Figure S1

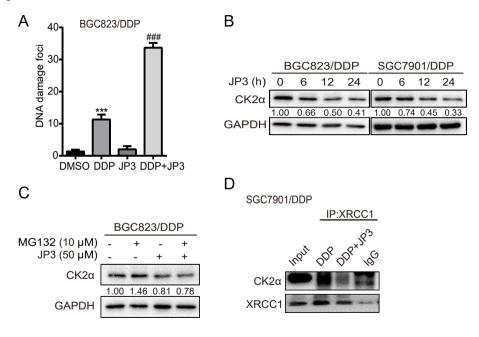
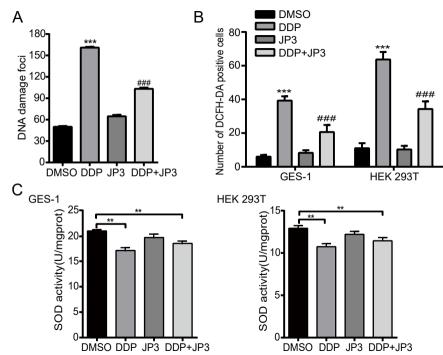


Figure S2



| Serum Index   | Groups        |               |              |               |
|---------------|---------------|---------------|--------------|---------------|
|               | Vehicle       | DDP           | JP3          | DDP+JP3       |
| ALT (U/L)     | 18.0±2.94     | 22.8±1.71*    | 18.5±1.91    | 20.5±2.38     |
| AST (U/L)     | 68.3±9.98     | 84.5±17.33    | 69.8±12.71   | 81.3±20.09    |
| TP (g/L)      | 31.2±5.34     | 43.0±5.79*    | 31.6±5.80    | 38.18±1.39*   |
| ALB (g/L)     | 18.6±3.23     | 27.2±3.79*    | 20.7±2.82    | 25.5±1.67*    |
| BUN (mmol/L)  | 7.9±1.29      | 11.7±1.70*    | 7.0±0.81     | 11.5±1.07*    |
| CREA (µmol/L) | 14.8±0.96     | 21.5±4.20*    | 11.3±0.96**  | 17.3±3.30     |
| LDH (U/L)     | 1036.3±164.59 | 747.5±131.37* | 925.8±292.94 | 647.3±161.29* |
| CK-MB (U/L)   | 278.5±56.88   | 258.0±68.82   | 244.8±62.96  | 252.3±69.71   |
| CK (U/L)      | 702.8±135.70  | 995.0±525.48  | 606.5±202.70 | 934.5±297.45  |

\*P < 0.05, \*\*P < 0.01 (vs. Vehicle); N=4