

Supplementary data

Table S1. Effects of D-gal administration on liver oxidative stress of male mice.

| Study model | Age (weeks) | D-gal | | | Major finding | Reference |
|--------------|-------------|------------------|-------|----------|-------------------------------|------------------|
| | | Dose (mg/kg/day) | Route | Duration | | |
| Kunming mice | 8 | 1250 | IP | 8 weeks | SOD ↓ | Wang et al. [61] |
| C57BL/6 mice | 8 | 800 | IP | 60 days | MDA ↑, SOD ↓, GSH ↓, CAT ↓ | Yang et al. [62] |
| Kunming mice | 8 | 500 | SC | 11 weeks | MDA ↑, SOD ↓, CAT ↓, GSH-Px ↓ | Zhao et al. [63] |
| ICR mice | 9–11 | 500 | SC | 6 weeks | MDA ↑, SOD ↓, CAT ↓ | Liu et al. [64] |
| Kunming mice | / | 400 | SC | 58 days | MDA ↑, SOD ↓, GSH-Px ↓ | Wang et al. [65] |
| Kunming mice | 8 | 200 | SC | 8 weeks | MDA ↑, SOD ↓, CAT ↓, GSH-Px ↓ | Mo et al. [66] |
| C57BL/6 mice | 5 | 150 | SC | 10 weeks | | Nam et al. [67] |
| ICR mice | 10–12 | 120 | IP | 12 weeks | MDA ↑, SOD ↓, CAT ↓, GSH-Px ↓ | Liu et al. [68] |

Note: IP, intraperitoneal; SC, subcutaneous; MDA, malondialdehyde; SOD, superoxide dismutase; CAT, catalase; GSH-Px, glutathione peroxidase; GSH, glutathione; CAT, catalase

Table S2. Effects of D-gal on concentrations of CAT and MDA in the liver of male mice.

| Group No. | Dose (mg/kg/day) | CAT (U/mgprot) | MDA (nmol/mgprot) |
|-----------|------------------|---------------------------|---------------------------|
| 1 | 0 | 15.36 ± 0.99 ^a | 29.85 ± 2.66 ^a |
| 2 | 120 | 13.37 ± 2.32 ^a | 31.89 ± 1.01 ^a |
| 3 | 400 | 6.48 ± 1.01 ^b | 35.09 ± 0.11 ^b |
| 4 | 800 | 2.71 ± 0.04 ^c | 39.17 ± 1.18 ^c |

Data are presented as the mean ± SD (n = 8). Mean values with different superscripts (a, b, c) in the same column are significantly different (P < 0.05), whereas the same superscripts are not (P > 0.05).