



Figure S1. Effects of MnSOD treatment on the proliferation, cell cycle, and apoptosis of RGM-1 cells. **A)** Cell viability was evaluated by an MTT assay at days 3 and 6 in RGM-1 cell lines after treatment with MnSOD WT. Data represent the mean values (\pm s.d.) of quadruplicate cultures averaged from two independent experiments and normalized to the H₂O control. Statistically significant differences between H₂O control and MnSOD treatment are presented as * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$. **B)** Apoptosis assays were performed in RGM-1 at day 4 post-treatment of MnSOD WT by using the PE Amexin V Apoptosis Detection Kit I. Apoptosis experiments were performed in triplicate. **C)** Cell cycle analysis was performed in RGM-1 at day 4 post-treatment with MnSOD WT. Cell cycle experiments were performed in triplicate.

Supplementary table 1. Cell cycle analyses (%), as shown in Figure 3A, after MnSOD treatment.

MnSOD (U)	SGC7901				BGC823			
	Pre-G₁/G₀	G₁	S	G₂	Pre-G₁/G₀	G₁	S	G₂
H₂O	4.7	68.2	16.2	10.9	15.0	64.1	10.3	10.6
50	2.6	66.5	17.2	13.7	27.5	46.7	11.1	14.7
100	1.3	67.6	15.0	16.1	39.3	37.2	12.7	10.8
200	1.7	56.1	13.9	28.3	68.4	22.3	5.4	3.9

Supplementary table 2. Cell apoptosis analyses (%), as shown in Figure 3B, after MnSOD treatment.

MnSOD (U)	SGC7901				BGC823			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
H₂O	4.1	0.7	95.2	0	8.1	0.9	91.0	0
50	6.0	1.2	92.8	0	11.2	2.4	86.4	0
100	8.5	2.6	88.8	0	13.3	5.5	81.1	0.1
200	34.7	7.8	57.5	0	54.3	37.4	8.3	0