Figure S1. Synergistic effect of the combination of chrysin and 5-FU in AGS cells. AGS cells were treated with chrysin, 5-FU or the combination of chrysin and 5-FU for 48 h. (A and B) Treated conditions, 1, 2, 3 and 4, of AGS cells were: 40, 50, 60 and 80  $\mu$ M for chrysin and 20, 25, 30 and 40  $\mu$ M for 5-FU, respectively. (A) Cell viability was measured by the MTT assay. (A) Data are presented as the mean  $\pm$  SD \*P<0.001; \*#P<0.001 (two-way analysis of variance). (B) CI values were calculated. White triangle, 40  $\mu$ M chrysin and 20  $\mu$ M 5-FU; black circle, 50  $\mu$ M chrysin and 25  $\mu$ M 5-FU; white square, 60  $\mu$ M chrysin and 30  $\mu$ M 5-FU; white rhombus, 80  $\mu$ M chrysin and 40  $\mu$ M 5-FU. 5-FU, 5-fluorouracil; CI, combination index; Fa, fractional effect; SD, standard deviation.

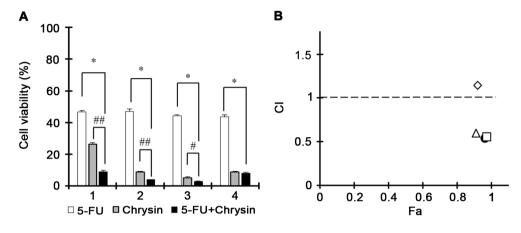


Figure S2. Semi-quantitation of apoptosis and cell cycle-related protein expression levels. Relative protein levels were calculated using ImageJ software and the data represented the ratio of target proteins and  $\beta$ -actin in western blotting (three repeats). Relative protein levels in (A and B) AGS cells and (C and D) AGS/FR cells. Data are presented as the mean  $\pm$  SD; \*P<0.05; \*\*P<0.01; \*\*\*P<0.001; \*P<0.001; \*

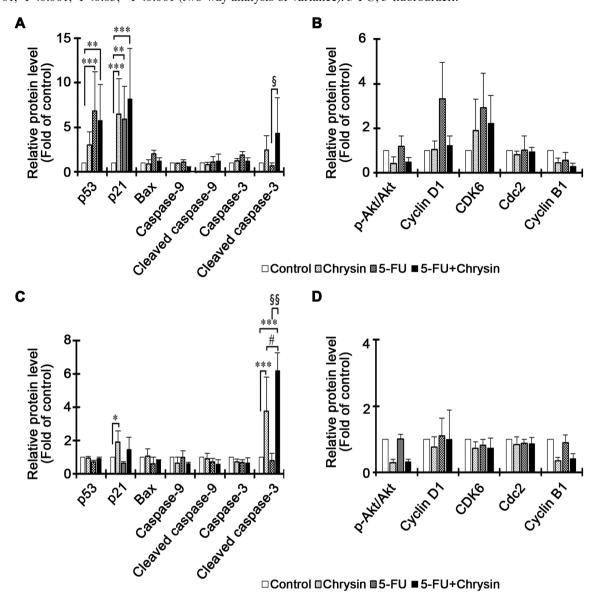


Figure S3. Western blotting of MDR1 in AGS and AGS/FR cells. (A) Protein expression levels of MDR1. (B) Relative protein levels were calculated using ImageJ software and the data represent the ratio of target proteins and  $\beta$ -actin in western blot analysis (three repeats). 5-FU, 5-fluorouracil; AGS/FR, 5-FU-resistant AGS cells; MDR1, multidrug resistance protein 1.

