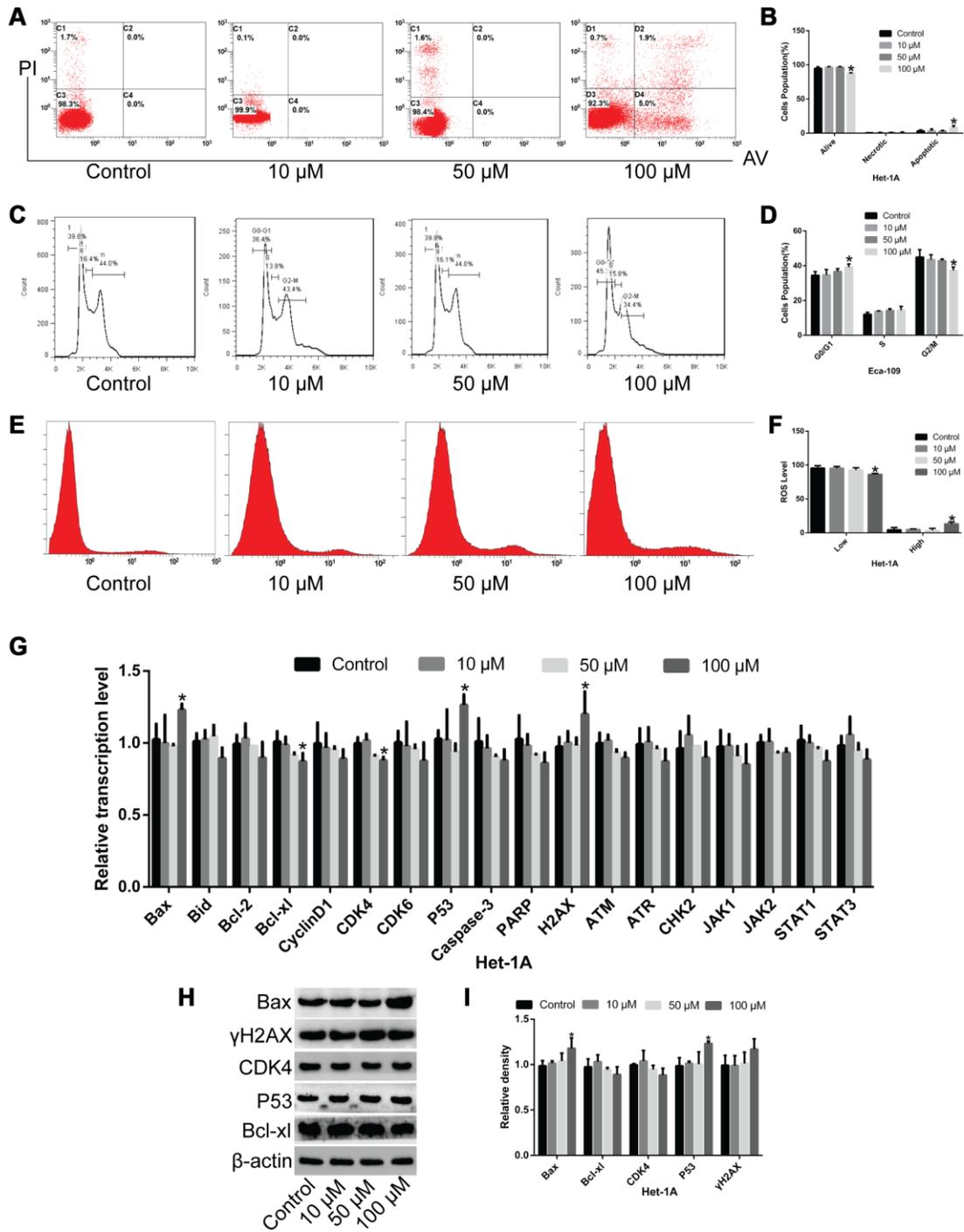
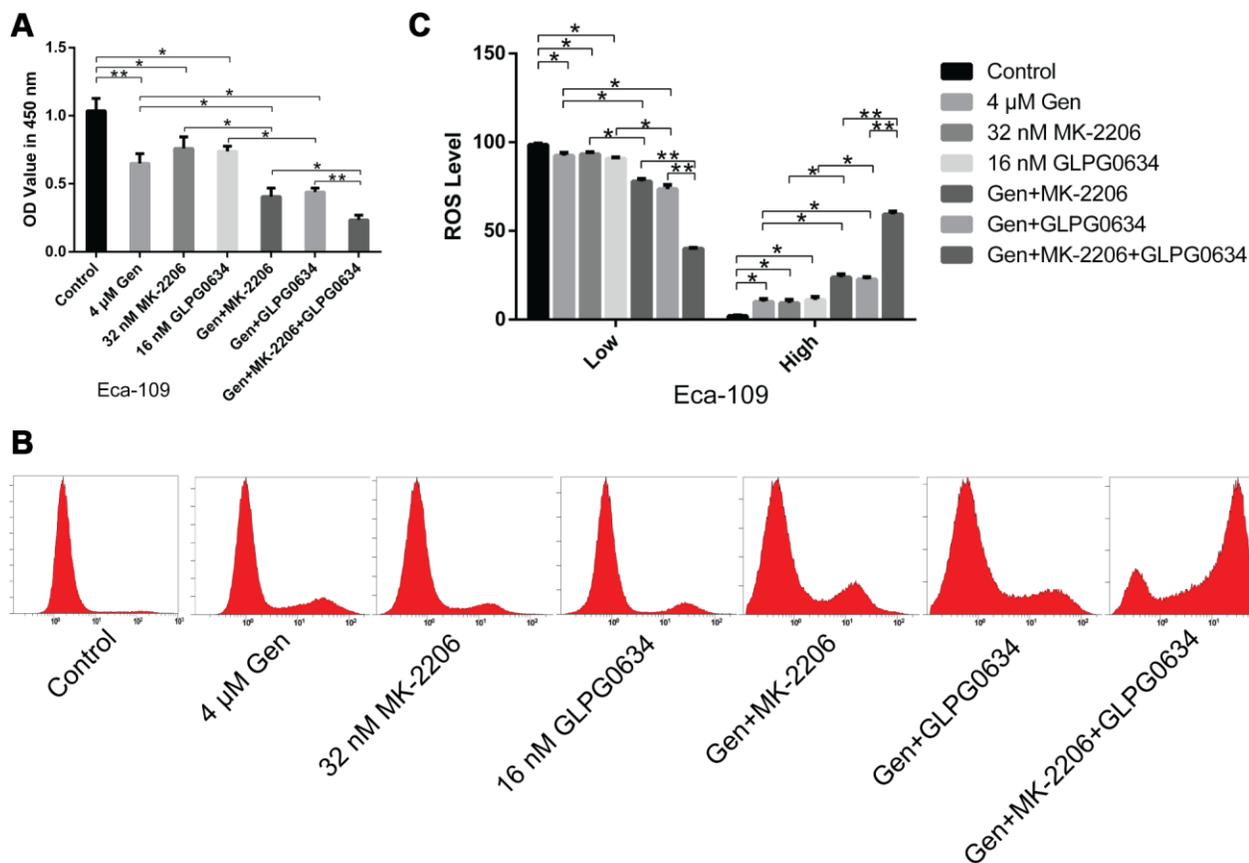


SUPPLEMENTARY FIGURES



Supplementary Figure 1: The effect of genistein treatment on human esophageal epithelial Het-1A cells. (A, B) The apoptotic rate, **(C, D)** the cell cycle distribution and **(E, F)** ROS level of Het-1A cells treated with various concentrations of genistein for 24 h. **(G)** The mRNA levels of Bax, Bid, Bcl-xl, CyclinD1, CDK4, CDK6, P53, Caspase-3, PARP, H2AX, ATM, ATR, CHK2, JAK1, JAK2, STAT1 and STAT3 in Het-1A cells treated with various concentrations of genistein for 72 h. **(H, I)** Protein levels of Bax, H2AX, CDK4, P53 and Bcl-xl in Het-1A cells treated with various concentrations of genistein for 72 h. All in vitro experiments were independently repeated three times. Comparisons among multiple groups were measured using one-way ANOVA with Dunnett's test. Data are presented as the mean \pm SD. * P <0.05.



Supplementary Figure 2. The synergistic effect of genistein with JAK1 and Akt pathway inhibitors on Eca-109 cells. Genistein (4 μ M) plus JAK1 pathway inhibitor GLPG0634 (16nM) and Akt pathway inhibitor MK-2206 (32nM) could extremely decreased (A) cell viability and facilitated (B, C) ROS production in comparison to Eca-109 cells treated with genistein and in combination with GLPG0634 or MK-2206 for 72 h. All in vitro experiments were independently repeated three times. Comparisons among multiple groups were measured using one-way ANOVA with Dunnett's test. Data are presented as the mean \pm SD. * P <0.05; ** P <0.01; Gen, genistein.