Figure S1. Respective IC₅₀ values of dinaciclib on MCF-7 and HCC-1806 human breast cancer cells. The respective cytotoxic effects of dinaciclib on (A) MCF-7 and (B) HCC-1806 cells were determined using MTT assays after cells were treated without or with indicated doses of dinaciclib for 72 h. Data are presented as the mean \pm SD of three independent experiments.^{***}P<0.001 vs. untreated cells (using one-way ANOVA). The indicated IC₅₀ values were calculated according to the bar graphs using Prism software.

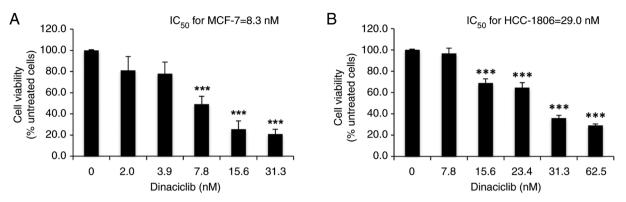


Figure S2. Effects of dinaciclib on the nuclear translocation of GLI1 in MCF-7 cells. Nuclear fraction (40 μ g) prepared from MCF-7 cells after treatment without or with indicated doses of dinaciclib for 24 h were subjected to western blot analysis, using primary antibody against GLI1. Lamin A/C was used as a loading control. GLI1, GLI family zinc finger 1.

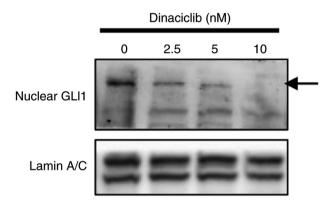


Figure S3. FoxM1 upregulation in HCC-1806 cells increases the protein expression levels of two breast cancer stem cell markers, as well as their resistance to dinaciclib. (A) Total lysates (20 µg) prepared from HCC-1806 cells carrying a doxycycline-inducible FOXM1 gene after being treated without or with indicated doses of doxycycline were subjected to western blot analysis to determine the protein expression levels of FoxM1, CD44 and ALDH1. β-actin was used as a loading control. (B) Cytotoxic effects of dinaciclib on the HCC-1806 stable clone treated without or with 1 mM doxycycline were examined using MTT assays. Data are presented as the mean \pm SD of three independent experiments. **P<0.01 and ***P<0.001 when the respective IC_{50} values of dinaciclib on cells treated without and with doxycycline were compared using one-way ANOVA. FoxM1, forkhead box M1; ALDH1, aldehyde dehydrogenase 1 family member A1.

