Supplemental data

Fig S1. Transfection efficency of hCaMKIINβ in HO-8910PM human ovarian cancer cells. HO-8910PM cells were transfected with hCaMKIINβ for 24 h. Cells were harvested, fixed with 4% Paraformaldehyde, permeabilized with perm (Biolegend) and labeled by anti-His antibody (New England Biolabs).

Fig S2. **hCaMKIINβ inhibits human ovarian cancer cell proliferation through suppression of endogenous CaMKII activity.** HO-8910PM cells were treated with KN-62 (Calbiochem, 10μM) for 5 h and then transfected with hCaMKIINβ or mock vector and cultured for 48h. Cell Proliferation was determined by MTT assay. *Bars,* SE.

Fig S3. Detection of hCaMKIINβ-induced apoptosis in HO-8910PM cells by transmission electron microscopy analysis. Stably transfected HO-8910PM cells were cultured for 48 h and then were visualized under transmission electron microscopy. Bar=5μm.

Fig S4. **Quantification of hCaMKIINβ-induced** target protein expression **in HO-8910PM human ovarian cancer cells**. HO-8910PM cells were collected 24, 48, and 72h post-transfection with hCaMKIINβ for Western blot analysis with the indicated antibodies. A, p53 expression in Fig. 6A was performed quantitative analysis. B, p-Akt (left) and p-HDM2 (right) expression in Fig. 6B was performed quantitative analysis. *, $P<0.01$ *vs.* mock.

Fig S5. **Assay for OVCAR-3 human ovarian cancer cell proliferation by MTT assay**. OVCAR-3 **c**ells were transfected with pKIINβ or mock vectors, and then stable transfectants were obtained by G418 selection. The expression of hCaMKIINβ was confirmed by Western blot analysis using anti-hCaMKIINβ polyclonal antibody. An 11-kDa protein band was prominent in hCaMKIINβ-transfected cells but not in mock-transfected or parental cells. The proliferation of stably transfected OVCAR-3 cells was examined by MTT assay. *Bars,* SE.

Figure S1

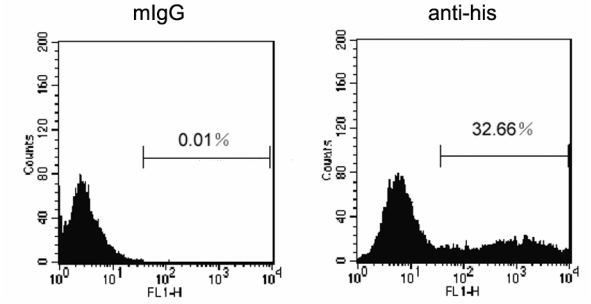


Figure S2

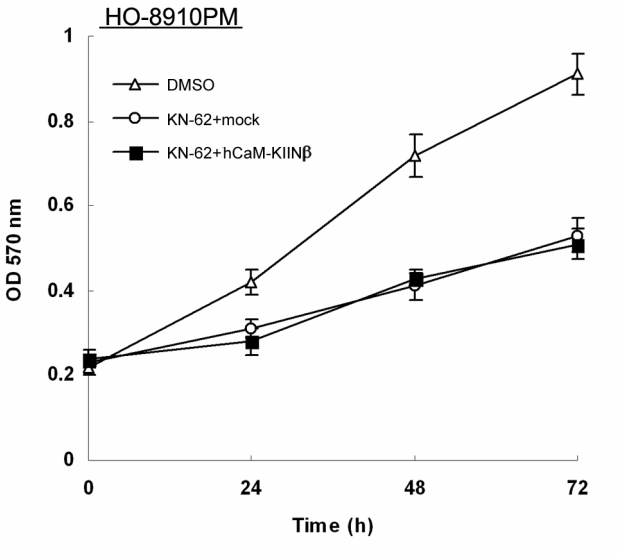


Figure S3

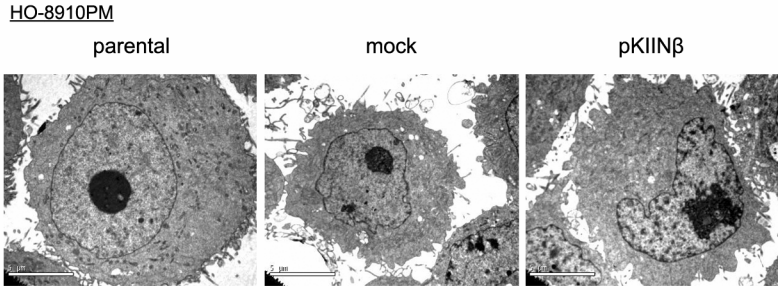


Figure S4

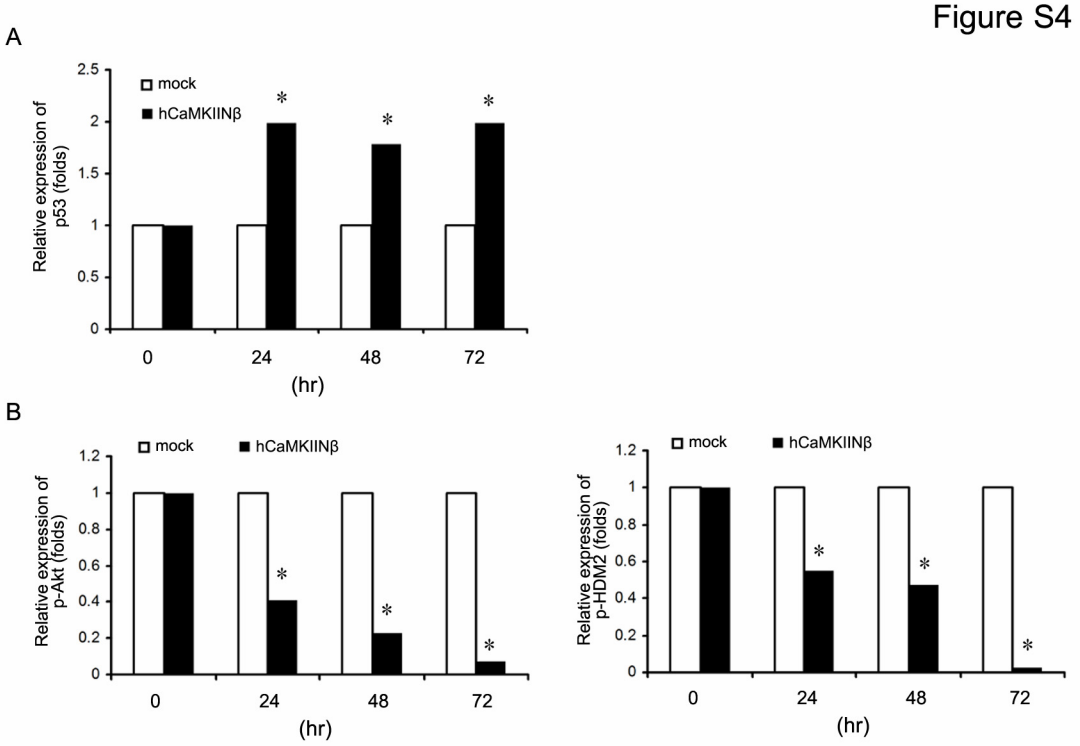
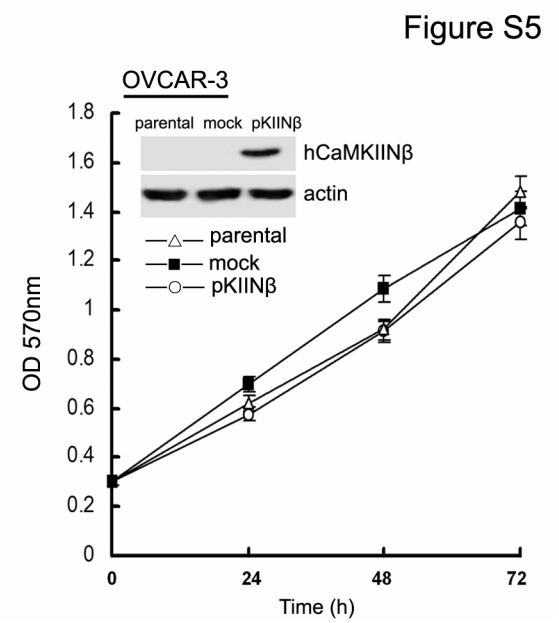


Figure S5


OVCAR-3
parental mock pKIINβ
hCaMKIINβ
actin
parental
mock
pKIINβ
OD 570nm
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
24
48
72
Time (h)