Supplementary Figure

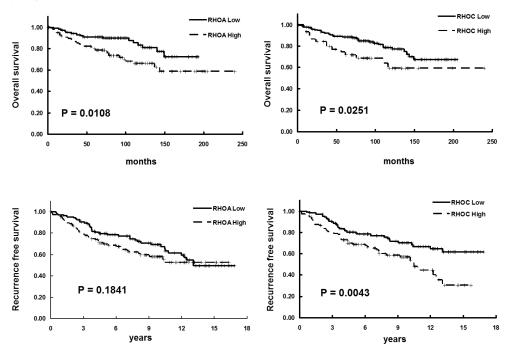


Figure S1. Overexpression of RhoA or RhoC is correlated with poor prognosis in breast cancer patients. The correlation between RhoA or RhoC expression and breast cancer patient prognosis (overall survival and recurrence free survival). The relationship between RhoA or RhoC expression and patient prognosis was examined using the SurvExpress database.

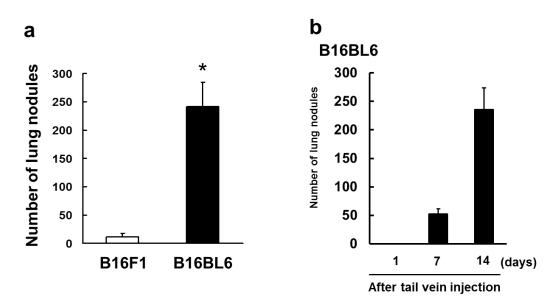


Figure S2. Confirmation of metastatic potential to B16F1 and B16BL6 cells. (a) B16F1 cells (1×10^5 cells in 0.2 ml) and B16BL6 cells (1×10^5 cells in 0.2 ml) were injected into the tail vein of syngeneic C57BL/6J mice. After 14 days, visible nodules that had metastasized to the lungs were counted. The results are expressed as the mean ± SD for 10 mice. *p < 0.01 vs. B16F1 cells (0.1% DMSO-treated) (ANOVA with Dunnet's test). (b) B16BL6 cells (1×10^5 cells in 0.2 ml) were injected into the tail vein of syngeneic C57BL/6J mice. After 1, 7, and 14 days, visible nodules that had metastasized to the lungs were counted. The results are expressed as the mean ± SD for 10 mice. *p < 0.01 vs. B16F1 cells (0.1% DMSO-treated) (ANOVA with Dunnet's test). (b) B16BL6 cells (1×10^5 cells in 0.2 ml) were injected into the tail vein of syngeneic C57BL/6J mice. After 1, 7, and 14 days, visible nodules that had metastasized to the lungs were counted. The results are expressed as the mean ± SD for 6 mice.

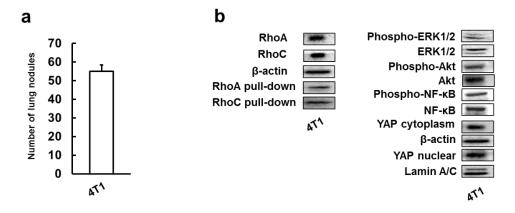


Figure S3. Confirmation of metastatic potential to 4T1 cells, expression of RhoA, RhoC, phospho-ERK1/2, phospho-Akt, phospho-NF-κB, and nuclear translocation of YAP. (a) 4T1 cells (1×10^5 cells in 0.2 ml) were injected into the tail vein of syngeneic Balb/c mice. After 14 days, visible nodules that had metastasized to the lungs were counted. The results are expressed as the mean ± SD for 10 mice. (b) Images of western blots for the RhoA, RhoC, RhoA-GTP form (RhoA pull-down), RhoC-GTP form (RhoC pull-down) and β-actin (internal standard), phospho-ERK1/2, ERK1/2, phospho-Akt, Akt, phospho-NF-κB, NF-κB, YAP, and lamin A/C.

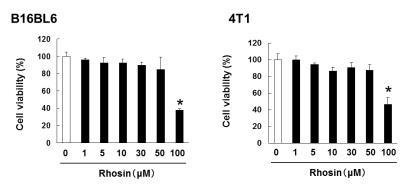


Figure S4. Determination of the rhosin concentrations suitable for administration to B16BL6 and 4T1 cells. B16BL6 or 4T1 cells were incubated in 96-well plates for 24 h and then treated with 1–100 μ M rhosin. Trypan blue exclusion assay was performed after five days. The results are representative of five independent experiments. *p < 0.01 vs. control (ANOVA with Dunnett's test).

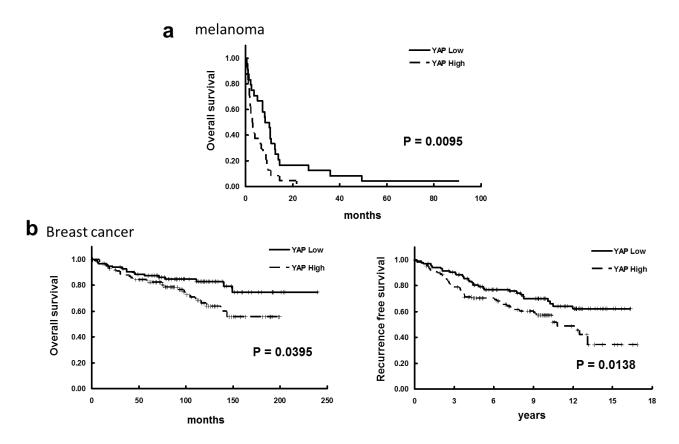


Figure S5. Overexpression of YAP is correlated with poor prognosis in melanoma and breast cancer patients. The correlation between YAP expression and (a) melanoma patient prognosis (overall survival) or (b) breast cancer prognosis (overall survival and recurrence free survival). The relationship between YAP expression and patient prognosis was examined using the SurvExpress database.

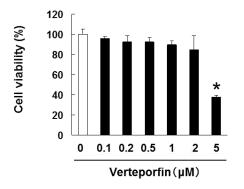


Figure S6. Determination of the verteporfin concentrations suitable for administration to B16BL6 cells. B16BL6 cells were incubated in 96-well plates for 24 h and then treated with $0.1-5 \mu$ M verteporfin. Trypan blue exclusion assay was performed after five days. The results are representative of five independent experiments. *p < 0.01 vs. control (ANOVA with Dunnett's test).

Figure 1a

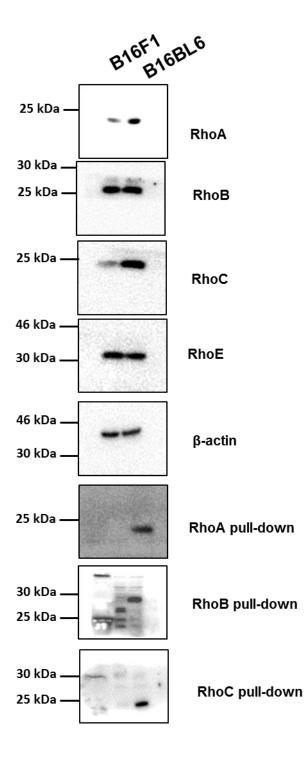
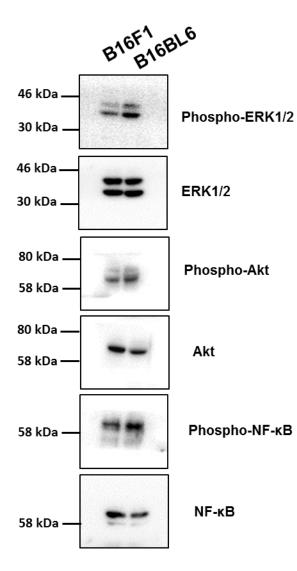


Figure 1b



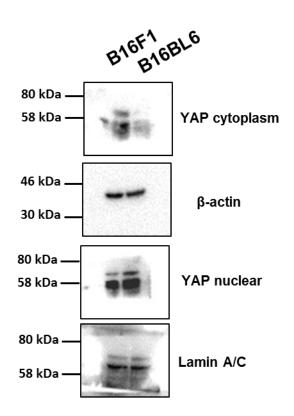
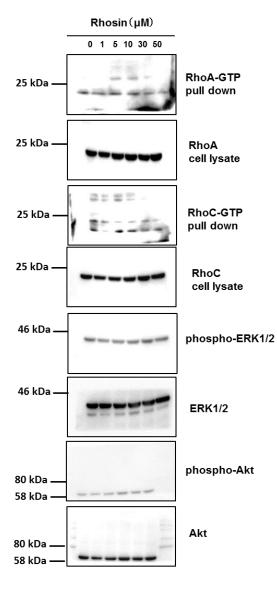
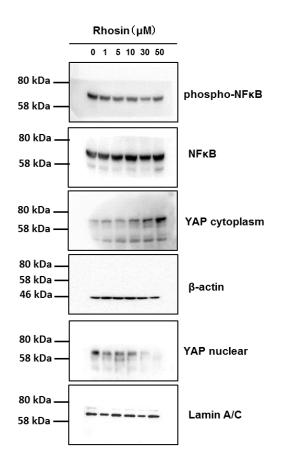


Figure 2a

B16BL6





4T1

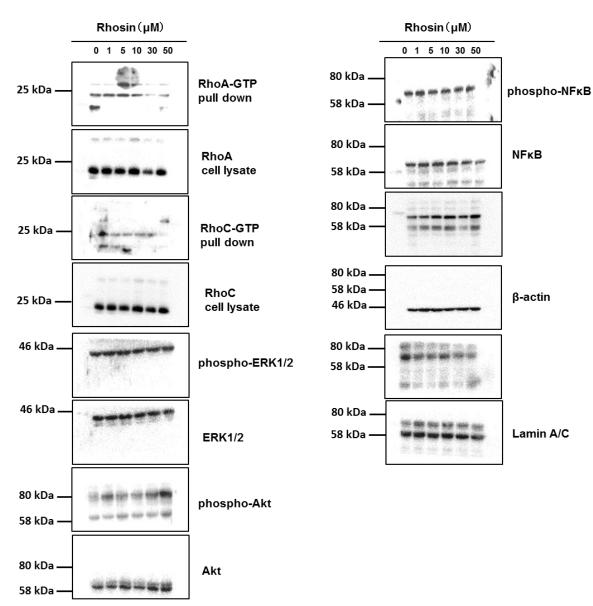


Figure 2c and d

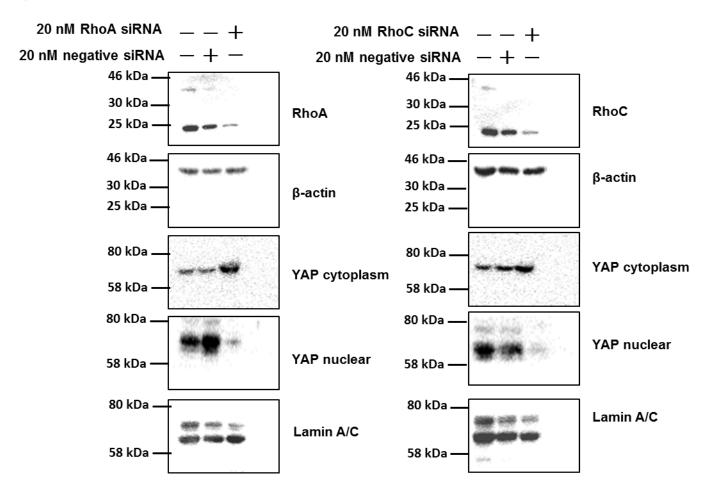
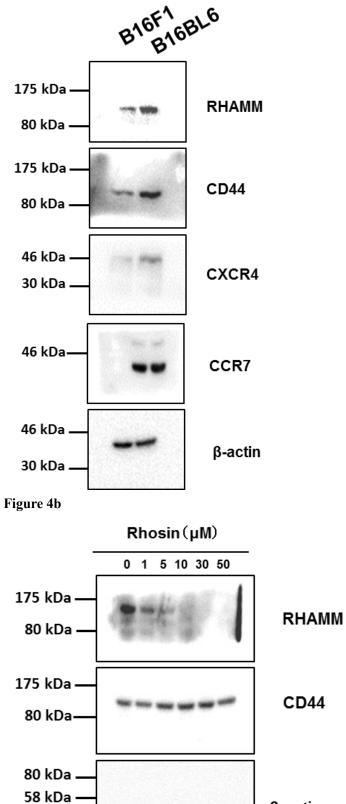


Figure 4a

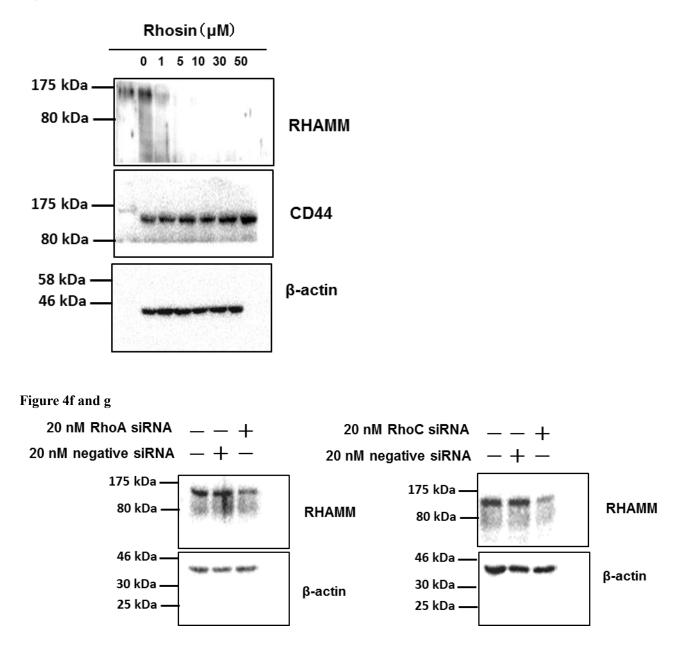
46 kDa -



CD44

β-actin

Figure 4d





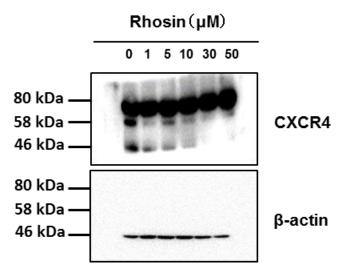
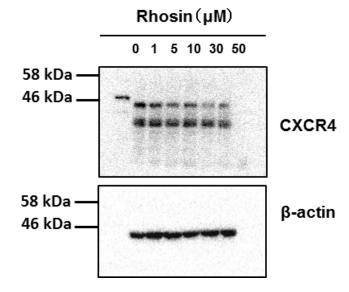
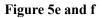


Figure 5c





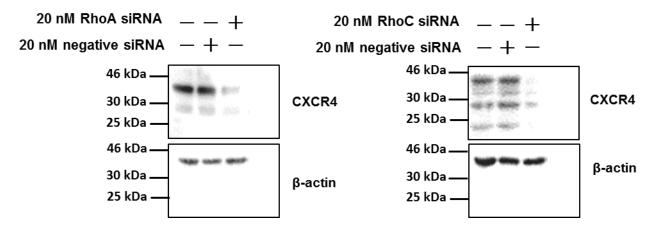


Figure 6a

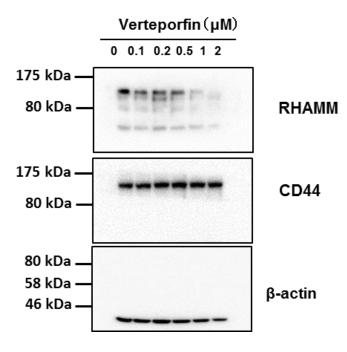
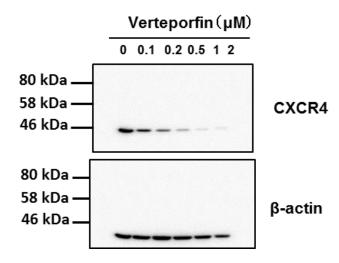


Figure 6c



Supplementary Figure 3

