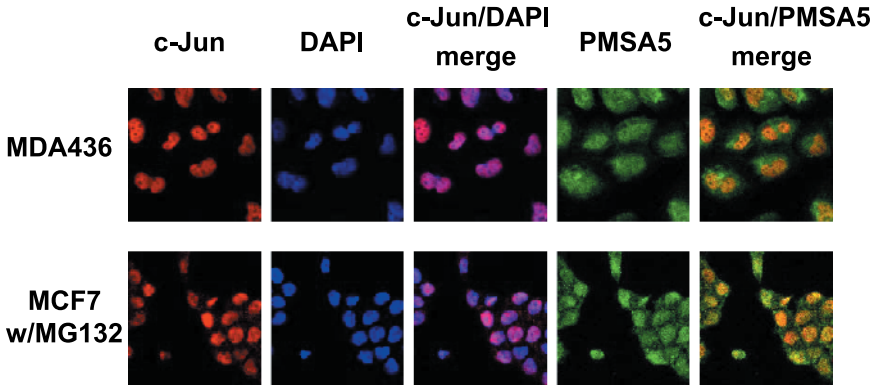


**Figure W1.** Colocalization of c-Jun and PMSA5. Immunofluorescence staining of c-Jun and PMSA5 in MDA-MB-436 and 10 $\mu$M MG132-treated MCF7 cells. DAPI was used to stain nucleus.

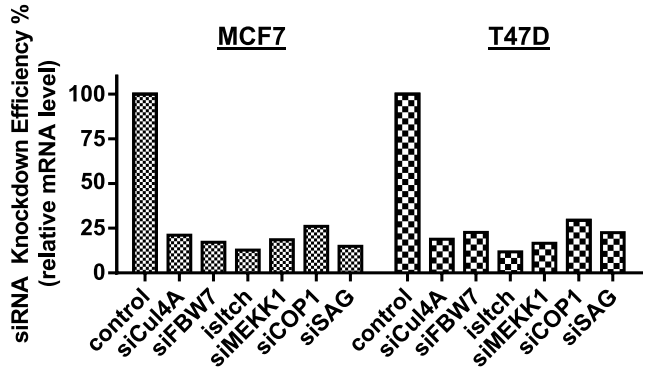


**Figure W2.** siRNA-mediated knockdown effect of c-Jun–targeting E3 ligases. MCF7 and T47D cells were transfected with 50 nM control or siRNA pool against CUL4, FBW7, ITCH, MEKK1, COP1, or SAG for 3 days. Total RNA was extracted from these cells and subjected to quantitative reverse transcription–polymerase chain reaction with the respective primers. β-Actin mRNA was used as the internal control for standardization.

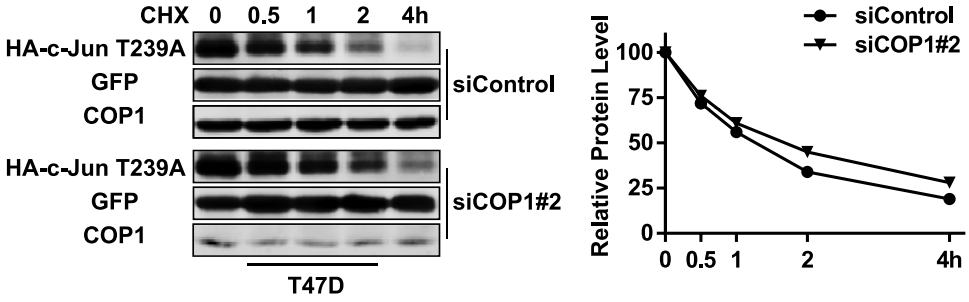


**Figure W3.** Depletion of COP1 does not alter protein stability of c-Jun–T239A. T47D cells were treated with control or COP1 siRNA for 2 days. HA-tagged c-Jun–T239A was then co-transfected into these cells with GFP for 1 day followed by the addition of 20 $\mu$g/ml cycloheximide for varying times. Cells were harvested, and cell lysates were analyzed by immunoblot analysis to detect HA-tagged c-Jun and GFP. The relative HA-tagged c-Jun amount was standardized by the amount of GFP.

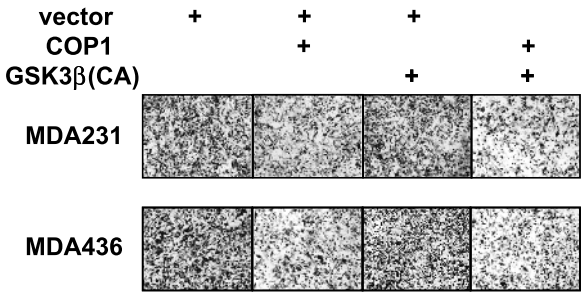


**Figure W4.** Simultaneously expressing COP1 and constitutively active GSK3β block cell migration of invasive breast cancer cells. COP1 and GSK3β(CA) were lentivirally transduced into MDA-MB-231 and MDA-MB-436 cells either alone or together. Populations of transduced cells were added into transwells and allowed to migrate for 4 hours. Images are crystal violet–stained migratory cells on the undersurface of transwells.

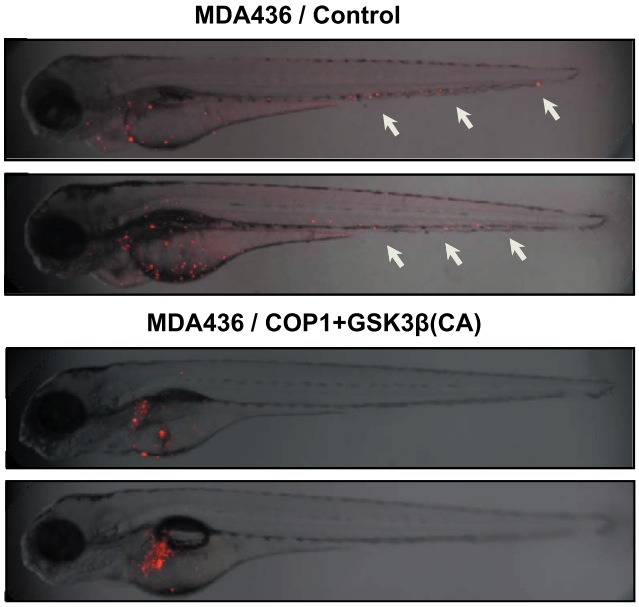


**Figure W5.** Simultaneously expressing COP1 and constitutively active GSK3β suppress breast cancer cell metastasis. MDA-MB-436 cells were lentivirally transduced with COP1 and constitutively active GSK3β together for 3 days. Control and COP1/GSK3βS9A-transduced MDA-MB-436 cells were then labeled with fluorescent dye CM-DiI and microinjected into the perivitelline space of 48-hpf zebrafish embryos. Embryos were imaged under a confocal microscope.

**Table W1.** Clinicopathologic Correlates of COP1 Expression in Human Breast Cancer.

| Clinical Features | COP1 Expression* | | *P* Value† |
|---|---|---|---|
| | Low (%) | High (%) | |
| Histologic grade | | | .28 |
| 1 | 5 | 6 | |
| 2-3 | 26 | 77 | |
| Tumor diameter | | | .72 |
| <2 cm | 6 | 22 | |
| ≥2 cm | 26 | 70 | |
| Lymph node status | | | .71 |
| Negative | 14 | 48 | |
| Positive | 15 | 40 | |
| ER receptor | | | .46 |
| Negative | 13 | 44 | |
| Positive | 20 | 46 | |
| PR receptor | | | .89 |
| Negative | 15 | 42 | |
| Positive | 12 | 35 | |

PR indicates progesterone receptor.
*Low/high by median (low, COP1 < 0; high, COP1 ≥ 0 expression value).
†Pearson $\chi^2$ test.