# A

Gemcitabine resistance

SUPPLEMENTAL FIGURE 1. Gemcitabine-resistance and effects of curcumin on cell cycle progression. *(A)* Effects of gemcitabine. Cells were treated with gemcitabine hydrochloride for 24 hr, and cell numbers were determined as described in the Materials and Methods. Significant (*P*<0.05) growth inhibition is indicated (*). *(B)* FACS analysis. Cells were treated with 50 μM curcumin for 6-24 hr and analyzed by FACS as described in the Materials and Methods. Results are means $\pm$ SE (3 replicates).
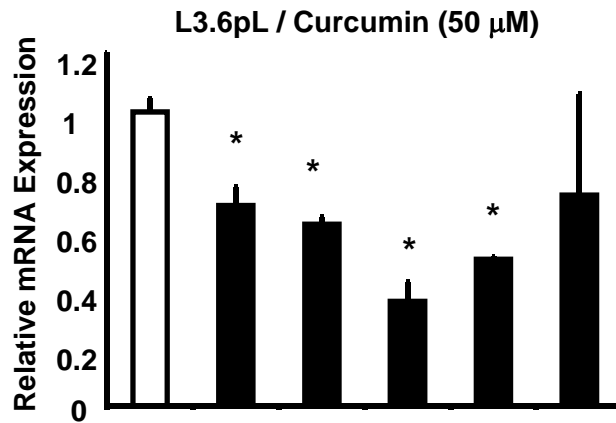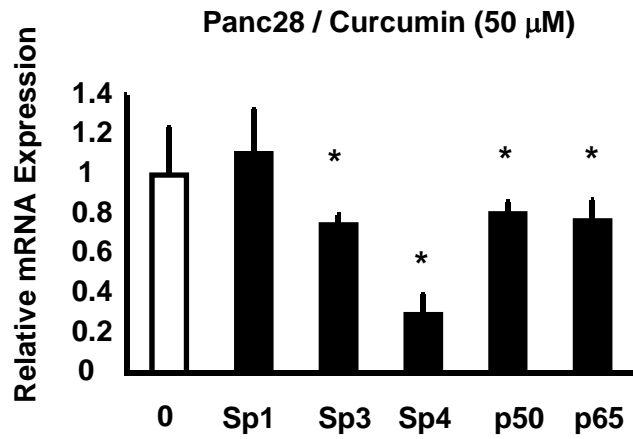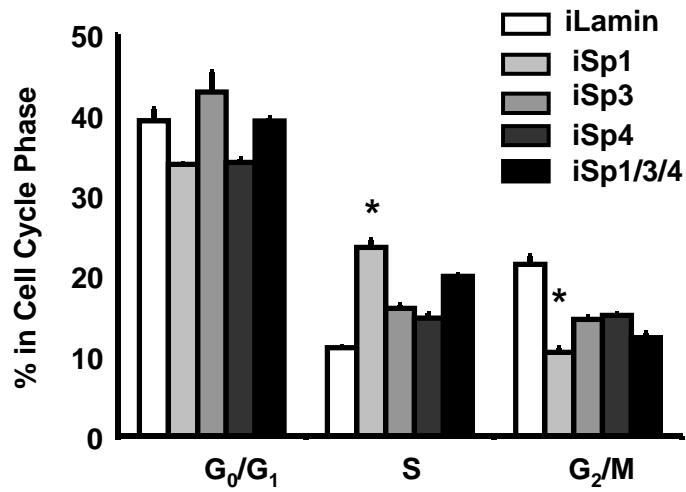
SUPPLEMENTAL FIGURE 2. Effects of curcumin on gene expression. Cells were treated with 50 μM curcumin for 24 hr, and mRNA levels were determined as described in the Materials and Methods. Results are means $\pm$ SE for 3 replicate determinations for each treatment group, and significant (P<0.05) decreases are indicated (*).
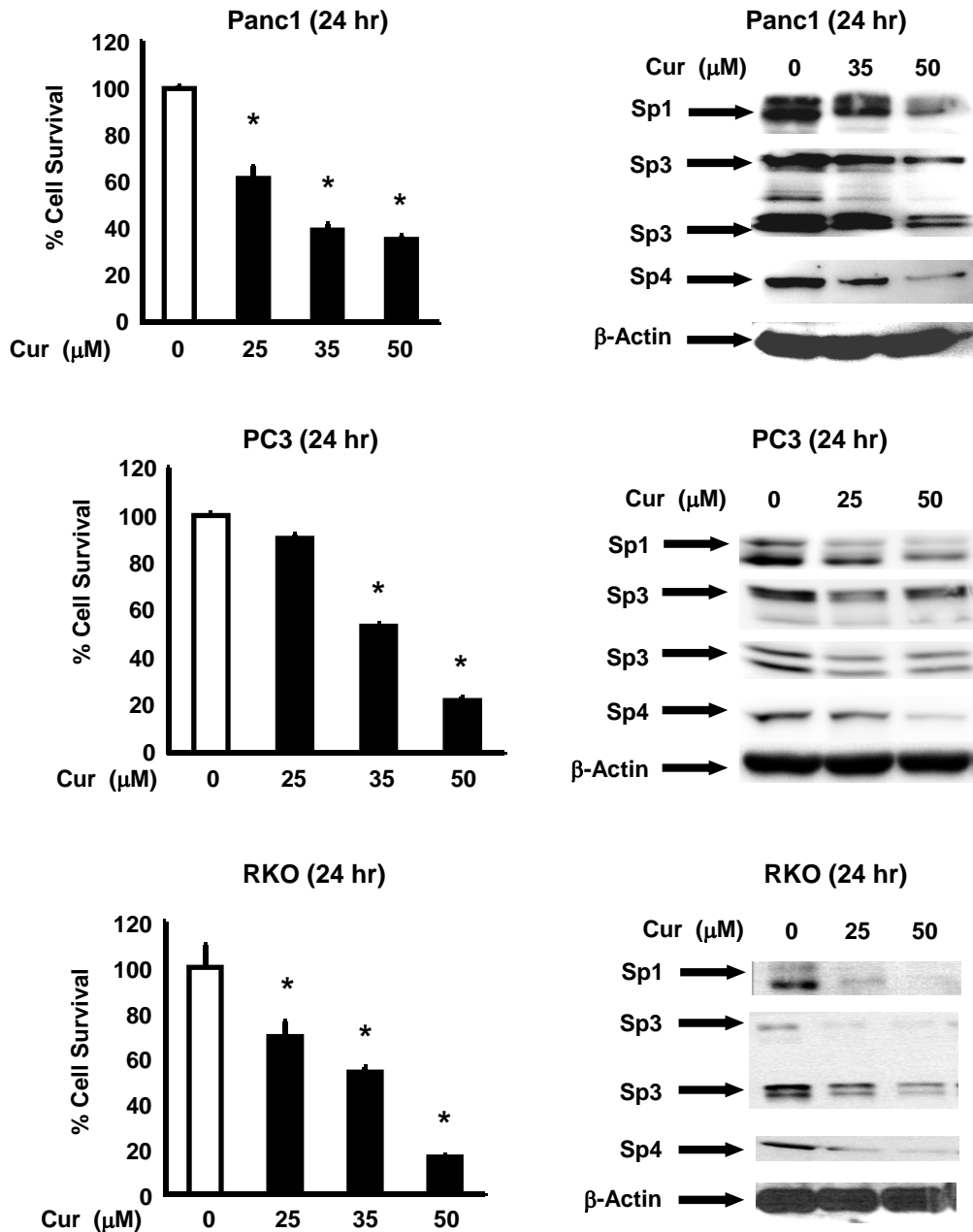
SUPPLEMENTAL FIGURE 3. Curcumin-induced growth inhibition and Sp downregulation. Cells were treated with curcumin for 24 hr, and cell number and western blots of cell lysates were determined as described in the Materials and Methods. Results of cell proliferation studies are means $\pm$ SE (3 replicates), and significant ($P<0.05$) growth inhibition is indicated (*).
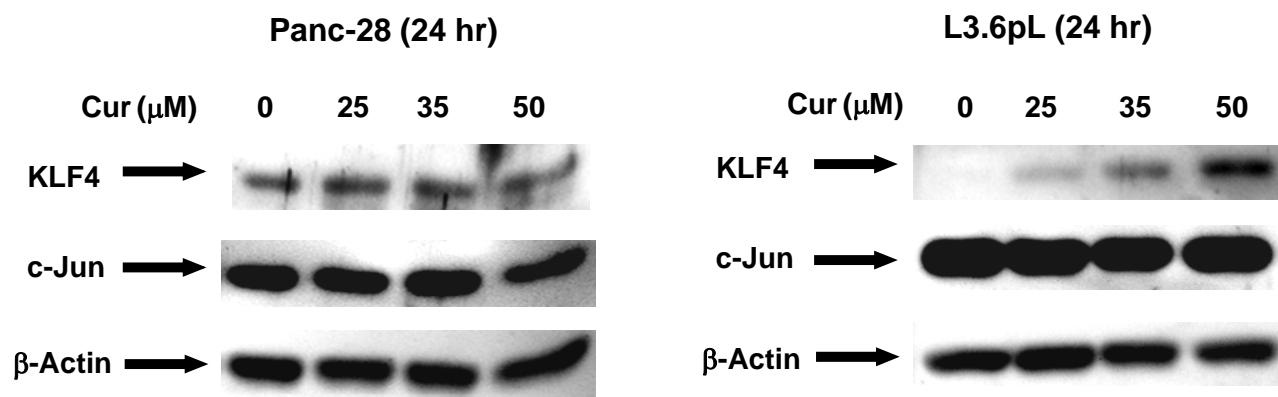
iSp Knockdown / Panc28 (72 hr) FACS

**iSp Knockdown / L3.6pL (72 hr) FACS**
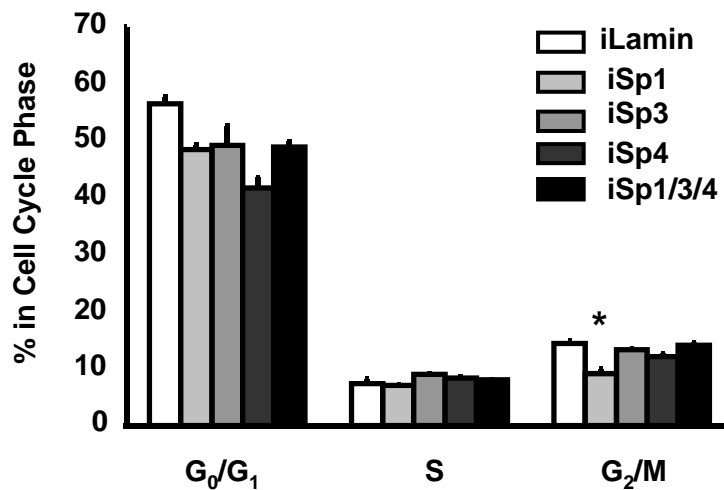
SUPPLEMENTAL FIGURE 4. Sp knockdown and FACS analysis. Cells were transfected with oligonucleotides and, after 72 hr, analyzed by FACS analysis as described in the Materials and Methods. Results are means $\pm$ SE (3 replicates/group).

Panc-28 (24 hr)

Cur (μM)　0　25　35　50

KLF4

c-Jun

β-Actin

L3.6pL (24 hr)
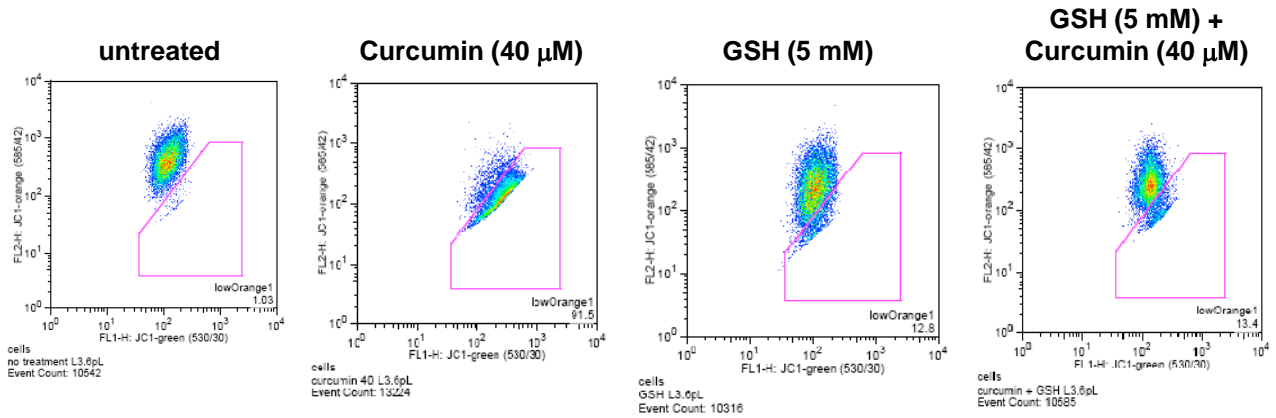
Cur (μM)　0　25　35　50

KLF4

c-Jun

β-Actin

SUPPLEMENTAL FIGURE 5. Effects of curcumin on KLF4 and c-jun. Cells were treated with curcumin for 24 hr, and whole cell lysates were analyzed by western blots as described in the Materials and Methods.

JC-1 staining FACS

Panc28
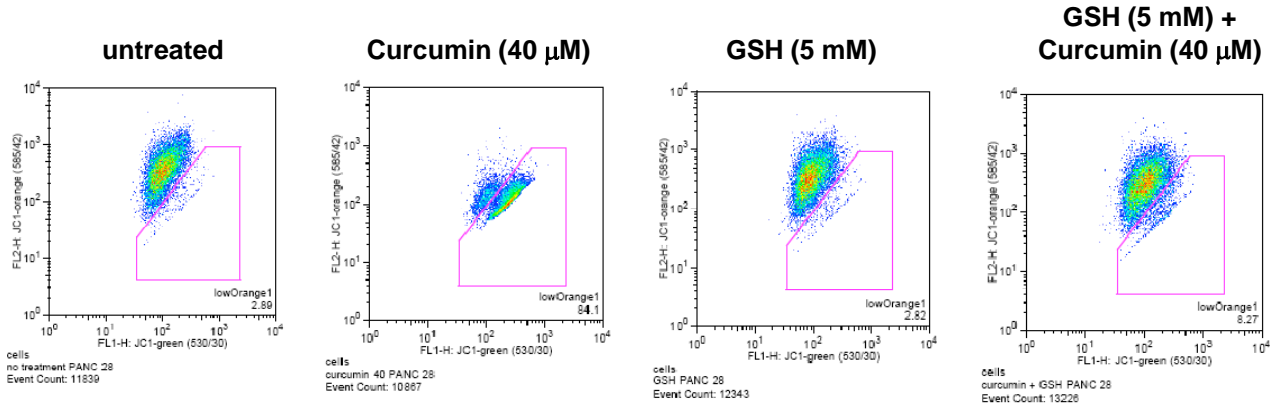
SUPPLEMENTAL FIGURE 6. Effects of curcumin on MMP. Cells were incubated with JC-1 and treated with 40 µM curcumin, 5 mM GSH, or their combination for 24 hr and analyzed by FACS analysis as described in the materials and Methods.