

Supporting figures

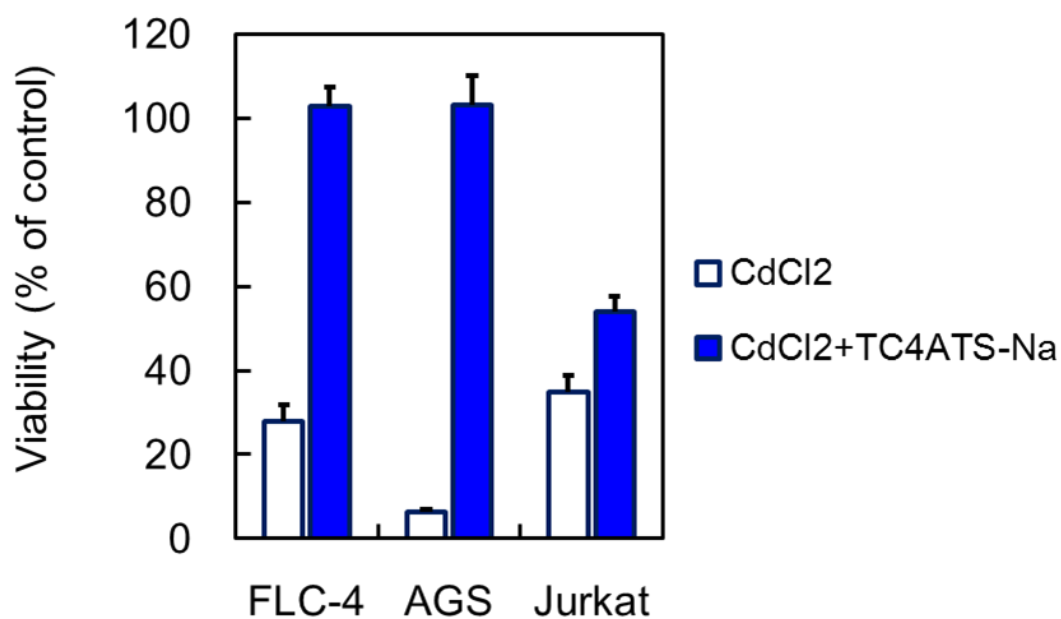


Fig. S1 Neutralizing effect of TC4ATS-Na against cadmium toxicity.

FLC-4, AGS, and Jurkat cells were treated with CdCl₂ (200 μ M for FLC4 and AGS, 2 μ M for Jurkat cells) alone or in combination with TC4ATS-Na (500 μ M for FLC4 and AGS, 5 μ M for Jurkat cells) for 48 h. Cell viabilities were analyzed using MTT assay to determine the cytotoxicity of tested agents. Data are presented as means \pm SD (n = 3).

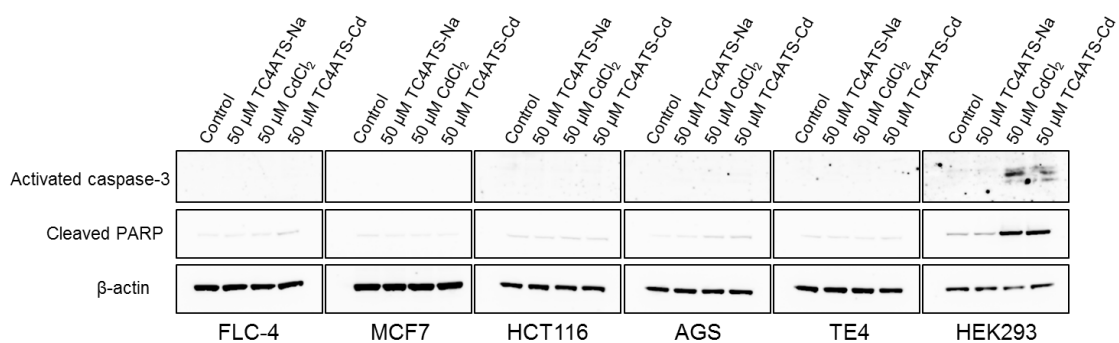


Fig. S2 Western blot analysis of activated caspase-3 and cleaved PARP in epithelia-derived cell lines.

Epithelia-derived cell lines were cultured with TC4ATS-Na, CdCl₂, or TC4ATS-Cd at 50 μM for 24 h. After treatment, cells were lysed. Cell lysates were clarified by centrifugation. After determination of protein concentration, equal amounts of protein were subjected to SDS-PAGE under reducing conditions. After electrophoresis, proteins were transferred to PVDF membranes. Membranes were blocked and then incubated with antibodies specific for activated caspase-3, cleaved PARP, or β-actin. After washing, the membranes were incubated with peroxidase-conjugated secondary antibody. Subsequently, targeted proteins were detected using ECL system.

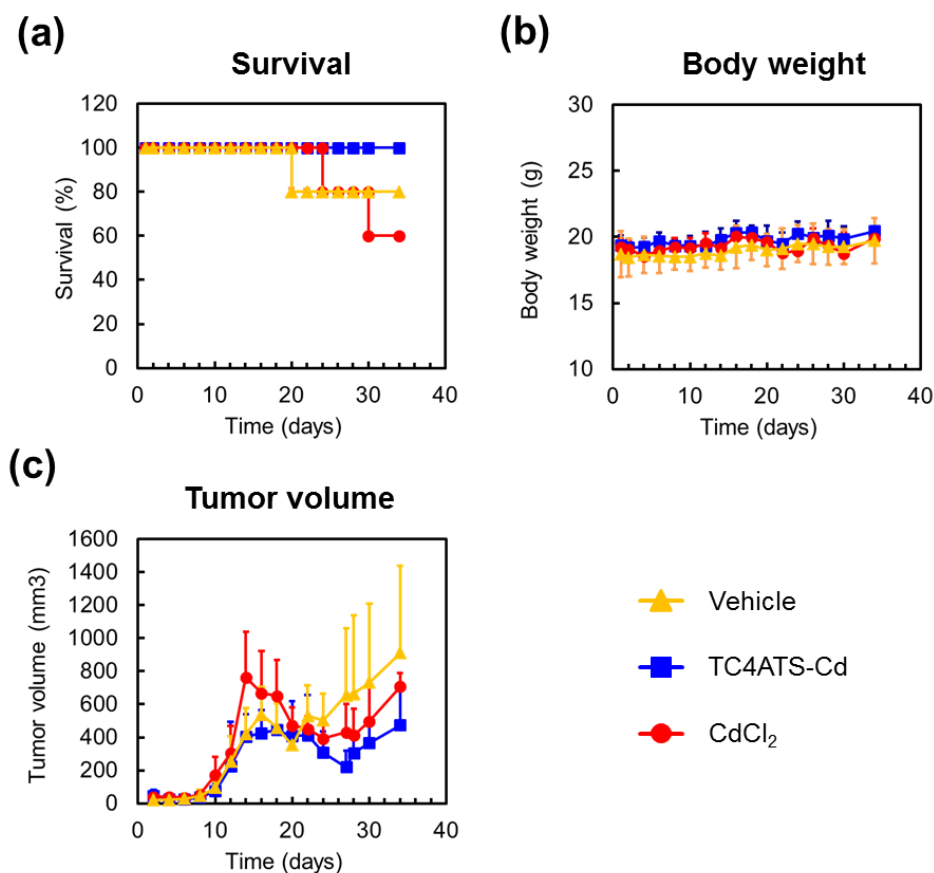


Fig. S3 TC4ATS-Cd elicits no adverse effects on tumor-bearing mice.

Jurkat cells were inoculated subcutaneously into SCID mice. Twenty days after inoculation, saline vehicle, TC4ATS-Cd (13 $\mu\text{mol/kg}$), or CdCl₂ (13 $\mu\text{mol/kg}$) were administered by i.p. injections 3 times weekly for 2 weeks. Body weights and tumor sizes were measured 3 times weekly. (a) Survival curves. (b) Body weights. (c) Tumor volumes. Tumor volumes were calculated as follows: Tumor volume = (Long length) \times (Short length)² \times 1/2. Data are presented as means \pm SD (n = 3-5).

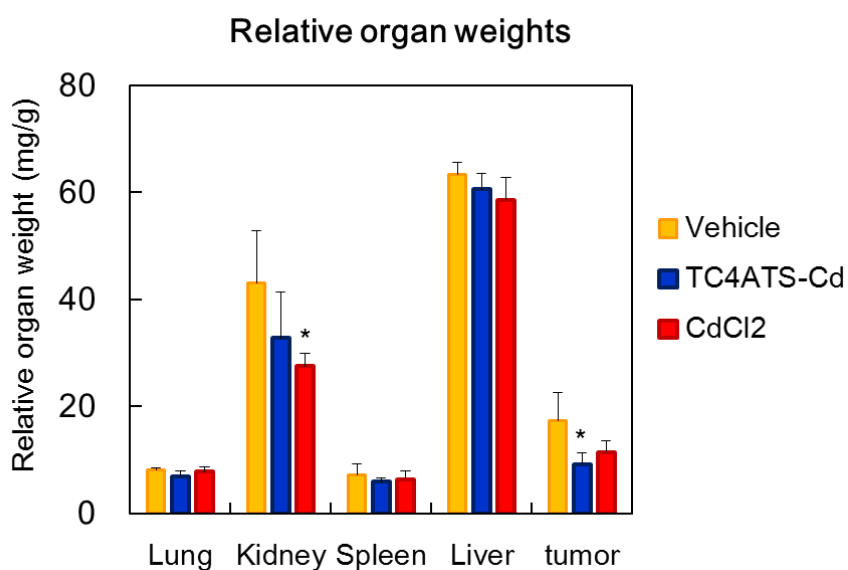


Fig. S4 Relative organ weights in tumor-bearing mice.

Jurkat cells were inoculated subcutaneously into SCID mice. Twenty days after inoculation, saline vehicle, TC4ATS-Cd (13 $\mu\text{mol/kg}$), or CdCl₂ (13 $\mu\text{mol/kg}$) were administered by i.p. injections 3 times weekly for 2 weeks. Thirty-five days after inoculation, mice were euthanized and tumors and organs were excised and weighed. Relative organ weights were calculated as follows: Relative organ weights = [Organ weight (mg)] / [Body weight (g)]. Data are presented as means \pm SD (n = 3-5). * $P < 0.05$, versus vehicle.