Supplemental figures and tables legends

**Figure S1.** WZB117 inhibited cell proliferation of cancer cells more than non-cancerous cells and exhibited synergy with anticancer drugs.

**A.** WZB117 inhibited cancer cell proliferation in a dose-dependent manner in A549 cells. A549 cells were treated with various concentrations of WZB117 and the cell proliferation rates of the treated cells were measured by the MTT assay.  **B.** WZB117 inhibited cell proliferation in breast cancer MCF7 cells more than their non-tumorigenic MCF12A cells.  **C.** Synergistic anticancer effects between WZB117 and anticancer drug cisplatin and between WZB117 and paclitaxel. H1299, A459, and MCF7 cells were grown in 96-well plates. Cells were treated with either cisplatin or paclitaxel at various concentrations in the presence or absence of 1 μM WZB117 for 48 hours. Proliferation rates of the treated cells were measured by the MTT assay.

**Figure S2.** Body weight and blood glucose levels of tumor-bearing mice treated by WZB117.

**A.** Comparison of body weights of WZB117 treated tumor-bearing nude mice with mock-treated tumor-bearing control mice. Body weights of the tumor-bearing mice of different treatments were measured once a week for 10 weeks after cancer cell inoculation.  **B.** Comparison of blood glucose changes of WZB117-injected mice with those of mock-injected mice. Tumor-bearing nude mice, which were fasted overnight, were injected with WZB117 or vehicle at 10 mg/kg at time zero. Blood glucose levels of the injected mice were measured every 30 min using tail vein blood.  N = 5 for control mice and N = 10 for WZB117-treated mice.

**Table S1.** Body composition of WZB117 treated tumor-bearing mice

**Table S2.** Blood analysis of WZB117-treated tumor-bearing mice
**Figure S3.** Intracellular ATP concentrations under different doses of extracellular ATP. Time-dependence of addition of extracellular ATP in rescuing WZB117-treated cancer cells, and WZB117-induced autophagy. **A.** Changes of intracellular ATP level in the after addition of extracellular ATP. Intracellular ATP levels started to increase when 0.25 mM or more extracellular ATP was added to the cell culture medium of A549 cancer cells at the same time of WZB117 treatment. **B.** Extracellular ATP started to lose its ability to rescue WZB117 treated cancer cells when the ATP was added 12 hours or later than the addition of WZB117. A549 cells were treated with WZB117 starting at time zero and extracellular ATP was added at different times post addition of WZB117 to determine the time at which the ATP lost its ability to rescue the compound treated cancer cells. Cell viability was measured 24 hours after the addition of ATP. **C.** Autophagy induced by WZB117-treatment. The cleavage of an autophagy marker LC3 in the WZB117 treated cells was analyzed by Western blot. Glucose deprivation (2 mM) samples were used as controls.