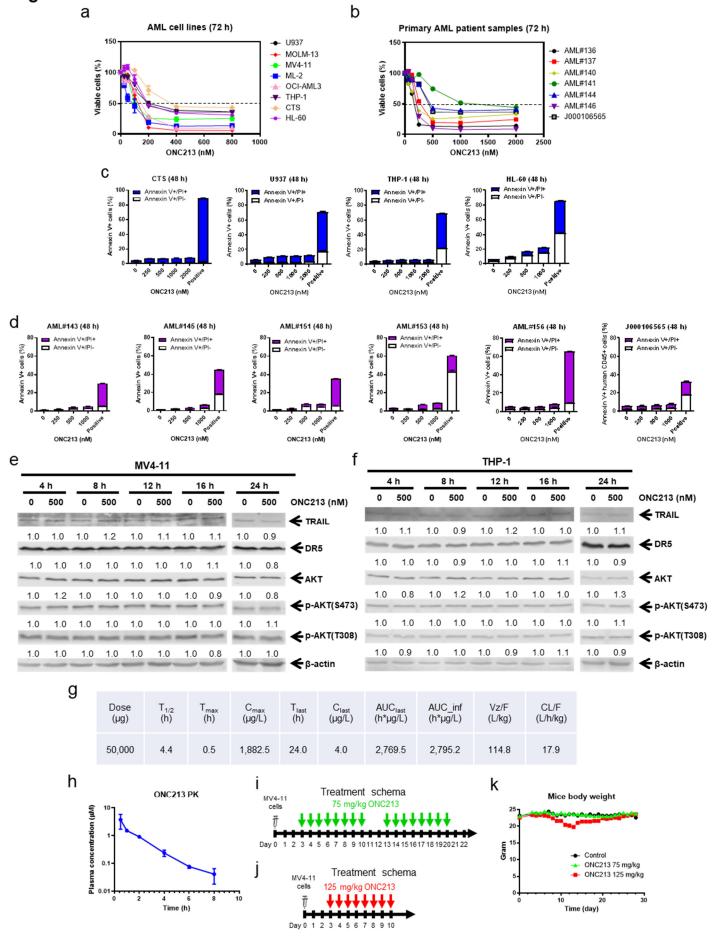
Fig. S1



**Fig. S1. ONC213** shows potent antileukemic activity against AML cells without inducing TRAIL and DR5. a&b. AML cell lines and primary patient samples were treated with variable concentrations of ONC213 for 72 h. Viable cells were determined using the MTT assay. Representative response curves are shown. **c&d**. AML cell lines CTS, U937, HL-60 and THP-1, primary patient samples (n=5), and J000106565 PDX cells were treated with vehicle, ONC213, or positive control (50 nM CUDC-907 + 1 μM venetoclax) for 48 h, and then analyzed by Annexin V-FITC/PI staining and flow cytometry analyses. Mean percent Annexin V+/PI- and Annexin V+/PI+ cells ± SEM are shown. **e&f**. MV4-11 and THP-1 cells were treated with 500 nM ONC213 for up to 24 h. Whole cell lysates were analyzed by western blotting. The fold changes for densitometry measurements, normalized to β-actin and then compared to the vehicle control at the same time point, are indicated below the corresponding blots. **g&h**. BALB/c mice (n=2 mice/time point) were treated with one oral dose of 50 mg/kg ONC213. Plasma samples were collected at 0, 0.5, 1, 2, 4, 6, 8, and 24 h after dosing. Pharmacokinetics was analyzed by a validated LC/MS-MS method. **i-k**. Panels i and j show the treatment schema used for the in vivo experiment shown in Fig. 1g. Body weights were measured daily and are graphed as mean ± SEM (panel k).