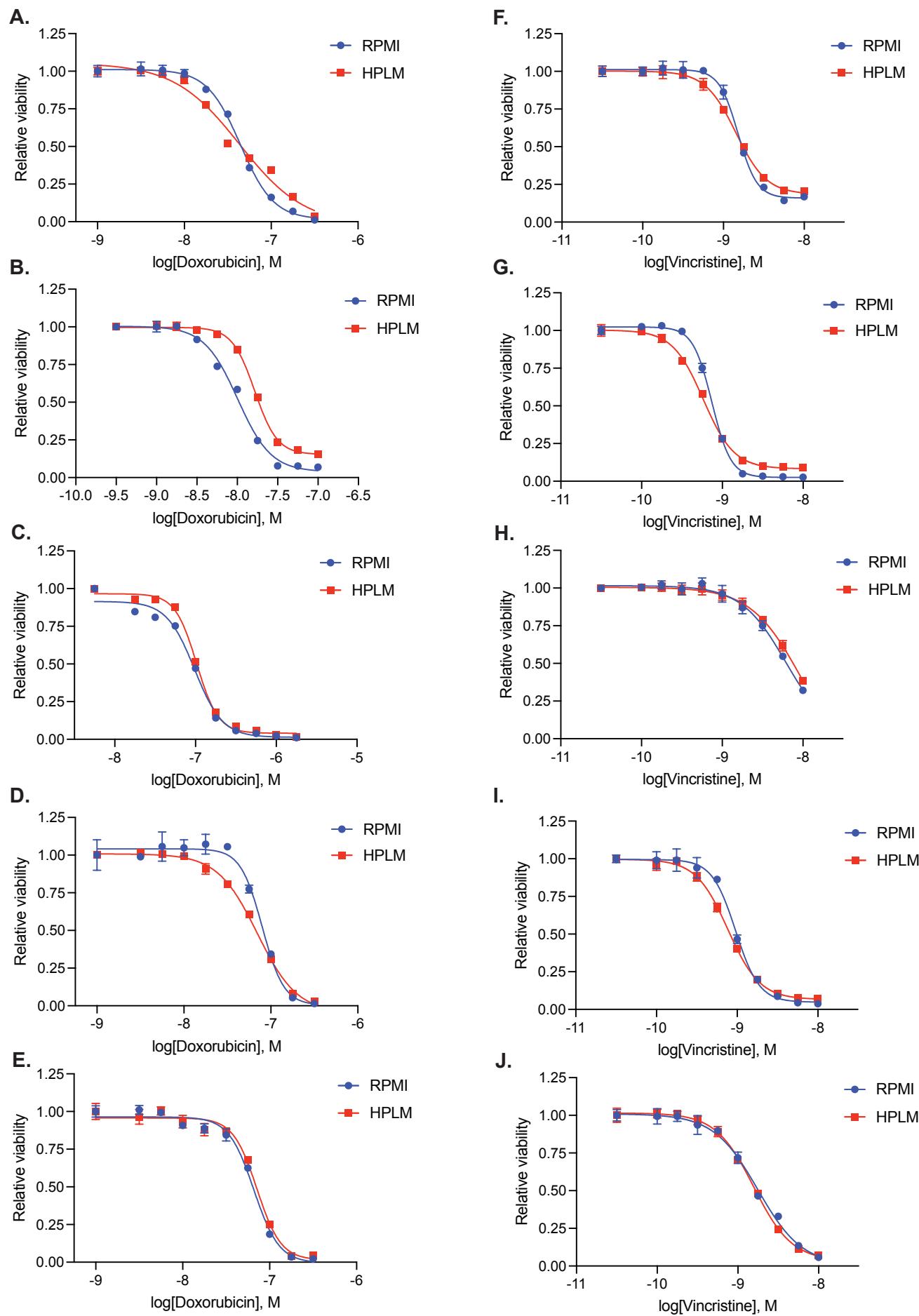
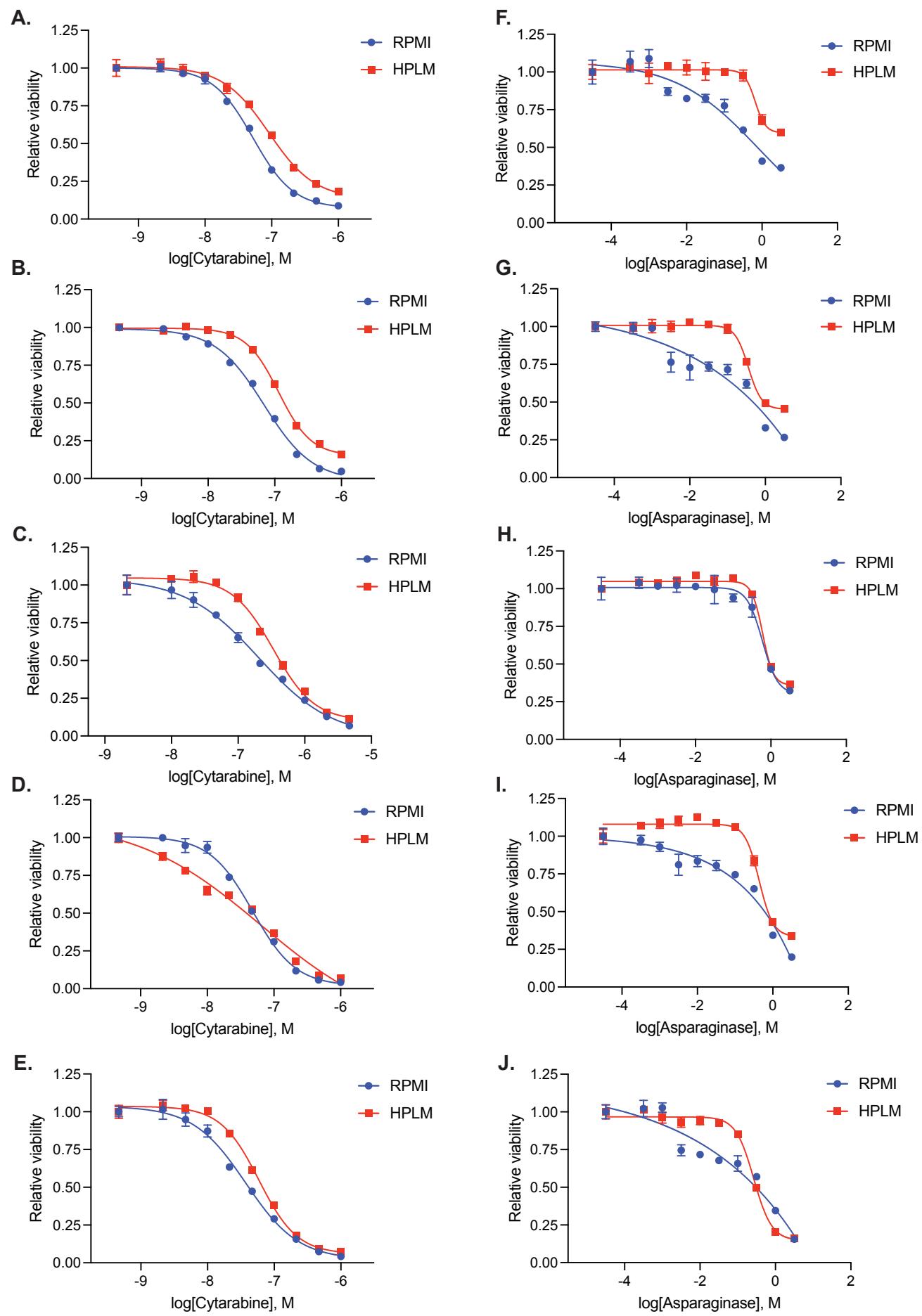


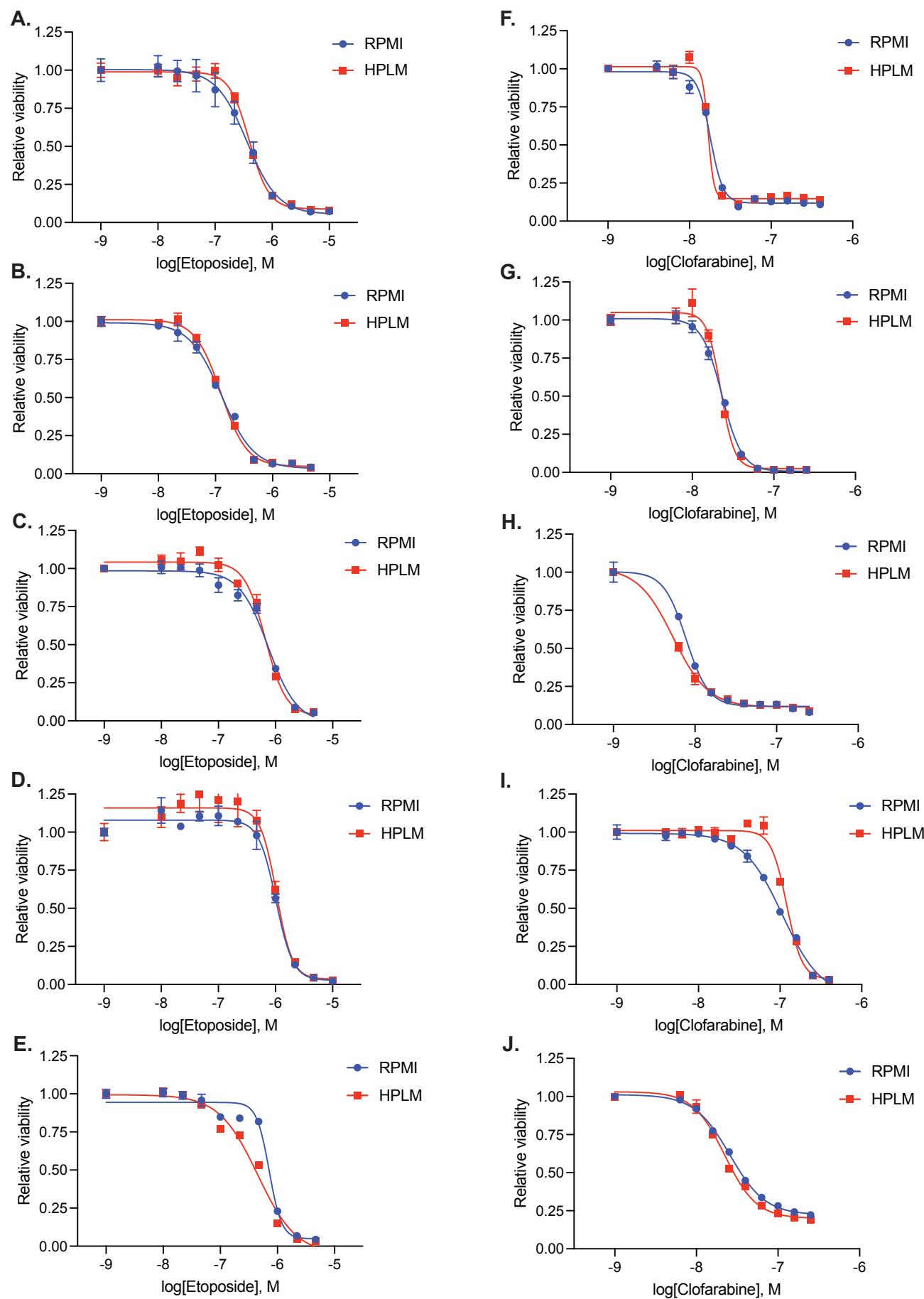
Supplemental Figure 1



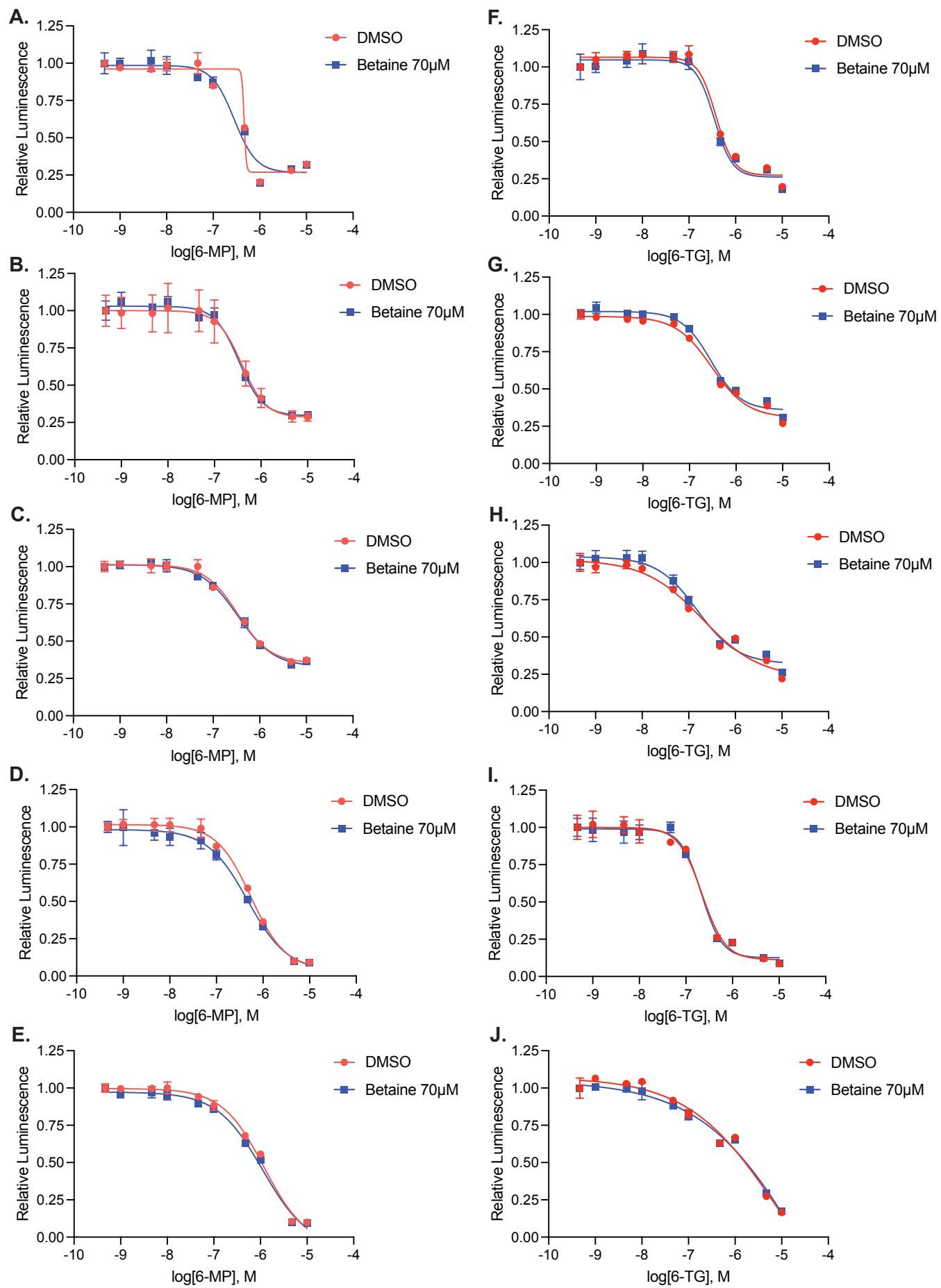
Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4



Supplemental Information

Supplemental Figure Legends:

Supplemental Figure 1: Leukemia cell chemotherapy sensitivity in regular compared to human plasma-like media. Doxorubicin (**A-E**) and vincristine (**F-J**) dose-response curves for leukemia cells (NALM-6, **A, F**; REH, **B, G**; SEM, **C, H**; Jurkat, **D, I**; CEM, **E, J**) in regular or human plasma-like media. Leukemia cell viability was assessed after 48 hours of drug treatment using the CellTiter-Glo Luminescent Cell Viability Assay. Error bars represent the mean ± SD of three technical replicates.

Supplemental Figure 2: Leukemia cell chemotherapy sensitivity in regular compared to human plasma-like media. Cytarabine (**A-E**) and vincristine (**F-J**) dose-response curves for leukemia cells (NALM-6, **A, F**; REH, **B, G**; SEM, **C, H**; Jurkat, **D, I**; CEM, **E, J**) in regular or human plasma-like media. Leukemia cell viability was assessed after 48 hours of drug treatment using the CellTiter-Glo Luminescent Cell Viability Assay. Error bars represent the mean ± SD of three technical replicates.

Supplemental Figure 3: Leukemia cell chemotherapy sensitivity in regular compared to human plasma-like media. Etoposide (**A-E**) and clofarabine (**F-J**) dose-response curves for leukemia cells (NALM-6, **A, F**; REH, **B, G**; SEM, **C, H**; Jurkat, **D, I**; CEM, **E, J**) in regular or human plasma-like media. Leukemia cell viability was assessed after 48 hours of drug treatment using the CellTiter-Glo Luminescent Cell Viability Assay. Error bars represent the mean ± SD of three technical replicates.

Supplemental Figure 4: Betaine supplementation of regular media dose not impact leukemia cell sensitivity to thiopurines. 6-MP (**A-E**) and 6-TG (**F-J**) dose-response curves for leukemia cells (NALM-6, **A, F**; REH, **B, G**; SEM, **C, H**; Jurkat, **D, I**; CEM, **E, J**) in regular media supplemented with betaine 70 µM or DMSO control. Leukemia cell viability was assessed after 48 hours of drug treatment using the CellTiter-Glo Luminescent Cell Viability Assay. Error bars represent the mean ± SD of three technical replicates.