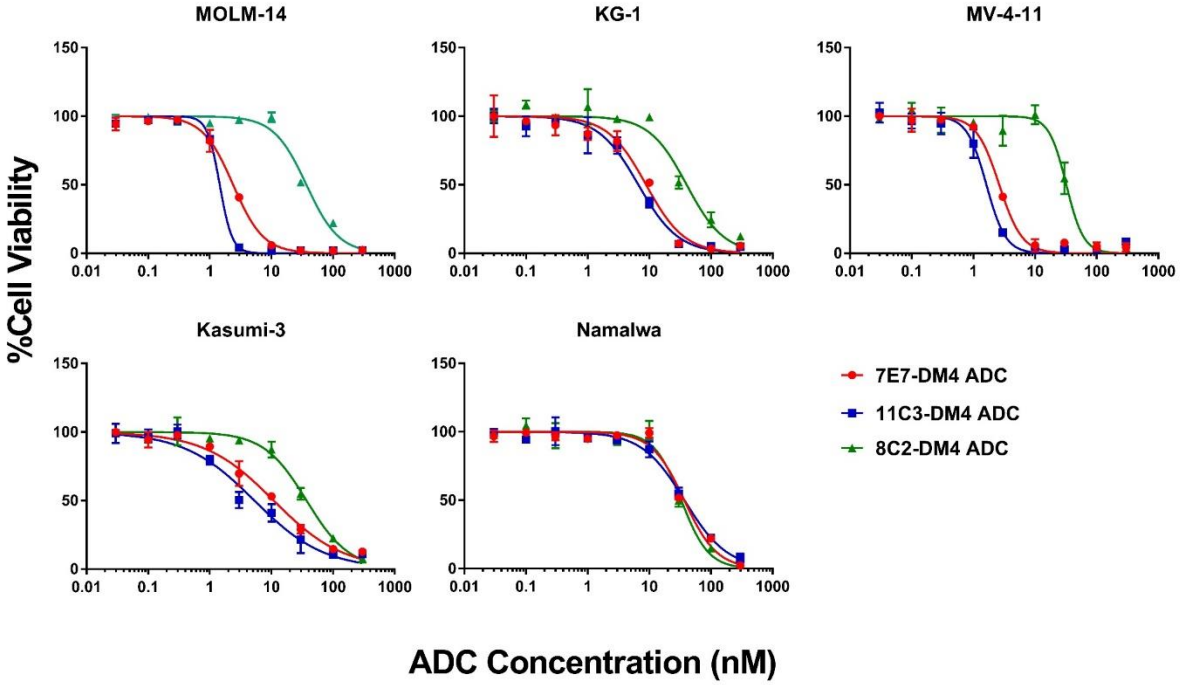

Supplemental Figure S4. *In vitro* cytotoxicity assessment of the anti-CD123-DM4 ADCs. A panel of AML cell lines, including MOLM-14, MV-4-11, KG-1, Kasumi-3, and Namalwa, were treated with CD123-targeting 7E7 and 11C3 DM4-ADCs, or non-targeting 8C2 ADC at concentrations between 0.03 to 300 nM for 96 hours, following with MTT-based assay to assess cell cytotoxicity. The results were normalized to cells treated with vehicle control and reported as % cell viability. The data was fitted for cytotoxic IC50 values with Hill slope in GraphPad Prism software. Each data point represents the mean of triplicate samples with standard deviation error bar. Both targeting ADCs 7E7-DM4 and 11C3-DM4 displayed potent cytotoxicity with IC50 values between 1 to 10 nM in an antigen-dependent manner. Namalwa, a CD123 non-expressing cell line, was used as a negative control for antigen-dependent ADC cytotoxicity. Calculated IC50s are reported in Table S2.