pharmaceutics

Supplementary Materials: Growth Inhibitory Effects of Ester Derivatives of Menahydroquinone-4, the Reduced Form of Vitamin $K_{2(20)}$, on All-Trans Retinoic Acid-Resistant HL60 Cell Line

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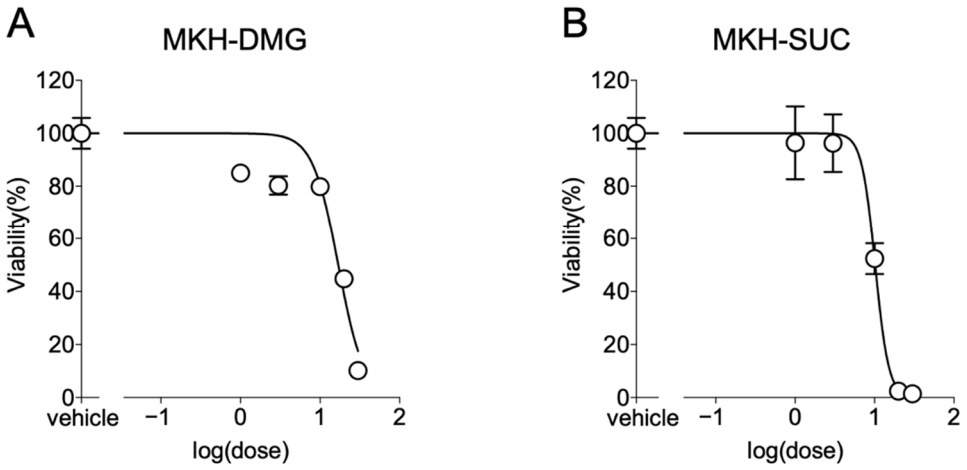

Figure S1. Inhibitory effects of MKH derivatives on the viability of NB-4 cells. The human promyelocytic cell lines NB-4 were provided by Cell Line Service (Eppelheim, German). The cells were treated with 1–30 μM MKH-DMG (**A**) or MKH-SUC (**B**) for 72 h. This experiment was performed as described in Materials and Methods 2.3. Error bars indicate mean ±SD (n = 3).

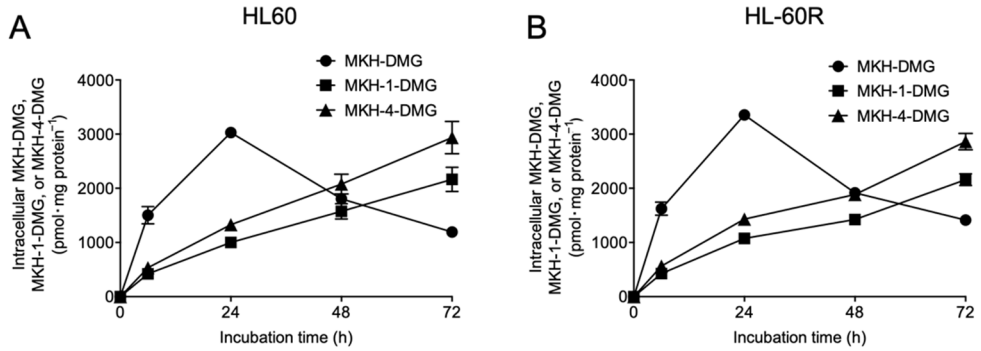

Figure S2. Intracellular concentration of MKH-esters (1,4-bis-ester, 1-monoester, and 4-monoester) in HL60 (**A**) and HL-60R (**B**) cells treated with 5 μM MKH-DMG up to 72 h. Error bars indicate mean ± SD (n = 3).

Table S1. Area under the curve over 72 h ($AUC_{0–72\ h}$) of intracellular concentrations of MKH-esters (1,4-bis-ester, 1-monoester, and 4-monoester) in HL60 and HL-60R treated with 5 μM MKH-DMG.

Intracellular Concentrations of MKH-Esters	**AUC $_{0\text{-}72\ h}$[a] (nmol·h·mg protein^{-1})**	
	HL60	**HL-60R**
MKH-DMG	139 ± 5.54	153 ± 3.08
MKH-1-DMG	89.9 ± 6.15	87.8 ± 4.21
MKH-4-DMG	119 ± 7.95	116 ± 5.65

[a] values are shown as Mean ± SD (n = 3).