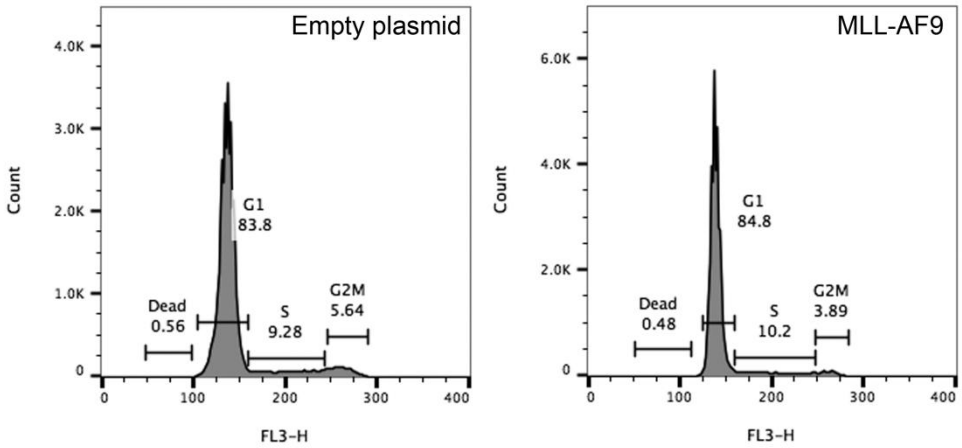
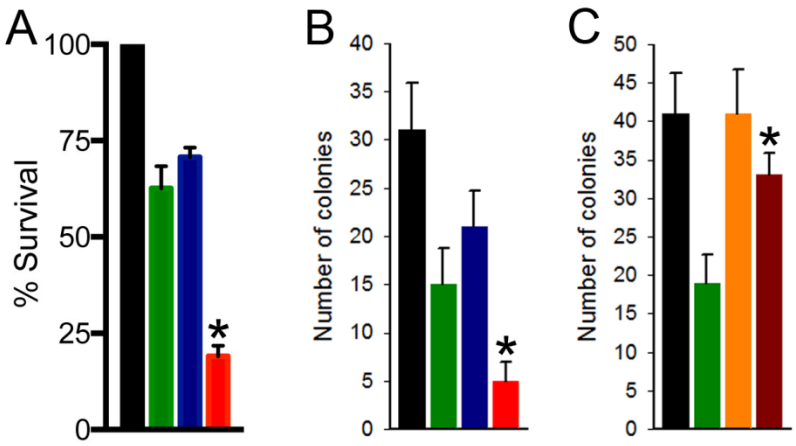
Supplemental Results



Supplemental Figure S1. Cell cycle analysis of murine bone marrow cells (mBMCs) transfected with empty plasmid or expressing MLL-AF9. Cell cycle was analyzed in mBMCs transfected with empty plasmid and in cells expressing MLL-AF9 as described before [1]. Results are representative of 3 independent measurements/group using different cell samples.



Supplemental Figure S2. MTH1 inhibitor enhanced the effect of olaparib in MLL-AF9 –positive leukemia cells. (**A**) MLL-AF9 –positive AML cell line MOLM-14 cells and (**B**) MLL-AF9 –positive mBMCs were untreated (black bars) and treated with 1 μM olaparib (green bars), 2.5 μM MCH51344 (blue bars) and olaparib + MCH51344 (red bars). (**A**) Living cells were counted after 72 hrs by trypan blue exclusion. Results represent mean percentage ± SD of living cells from 5 experiments; *p<0.001 in comparison to other groups using the response additivity approach. (**B**) Cells were plated in Methocult and colonies were scored after 7 days. Results represent mean number of colonies ± SD from 3 experiments; *p<0.01 in comparison to other groups using Student t test. (**C**) MLL-AF9 –positive mBMCs were untreated (black bar) and treated with 1 μM olaparib (green bar), 200 μM vitamin E (orange bar) and olaparib + vitamin E (brown bar). Cells were plated in Methocult and colonies were scored after 7 days. Results represent mean number of colonies ± SD from 3 experiments; *p<0.02 in comparison to olaparib.

References

1. Slupianek A, Hoser G, Majsterek I, et al. Fusion tyrosine kinases induce drug resistance by stimulation of homology-dependent recombination repair, prolongation of G(2)/M phase, and protection from apoptosis. *Mol Cell Biol*. 2002;22(12):4189-4201.