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Supplemental Material to:

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Identification of novel compounds that enhance colon cancer sensitivity to inflammatory apoptotic ligands

Cancer Biology & Therapy 2013; 14(5)
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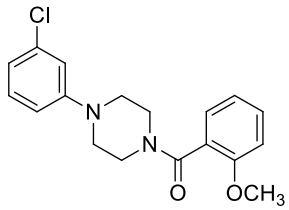
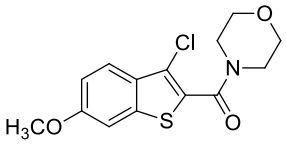


AK3



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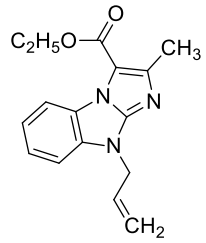
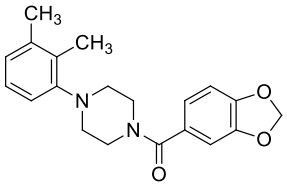
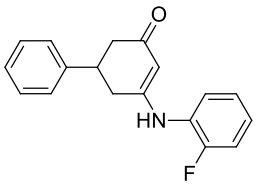


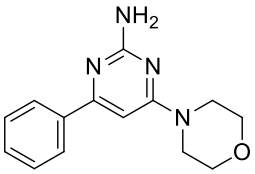
AK8



AK10

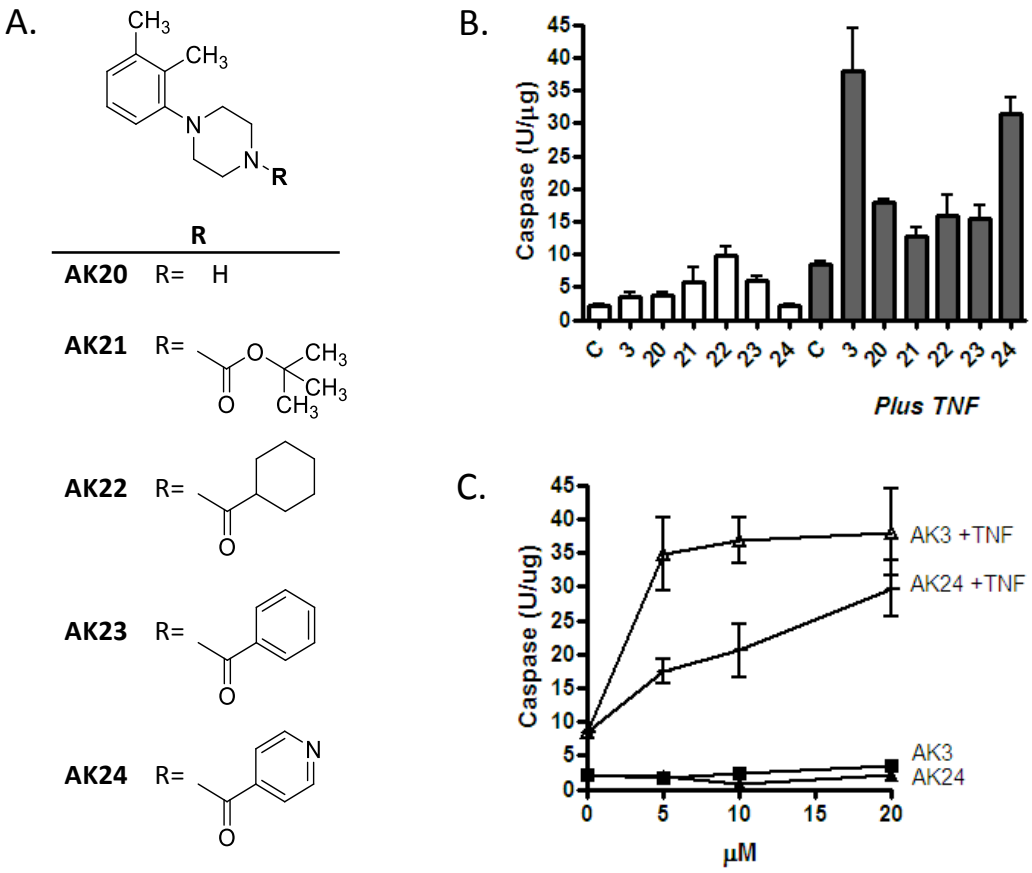


AK16



AK17

Supplementary figure 1: Structures of the compounds selected out of a screen of 400 compounds from ChemBridge DIVERSet^{TM} library of compounds. These compounds showed the highest levels of capase-3 activity as suggested by the percentage of cells expressing cleaved capase-3.



Supplementary figure 2: Structure-specific requirement for TNF sensitization of colon cancer cells. (A) Structural analogs of AK3 and AK10 (AK20-24) were prepared with modifications to the benzoyl group and tested for TNF-sensitizing activity. Modifications included removal of benzoyl group (AK20), substitution with *tert*-butyl (AK21), benzo[1,3]dioxol-5-yl (AK22), phenyl (AK23), and pyridin-4yl (AK24). (B) HT-29 cells treated with analogs in *A* at 25 µM and tested for their ability to enhance caspase-3 activation in a TNF-dependent manner using the DEVD-AMC cleavage assay. AK3 and AK24 induced significantly higher caspase activity than the other compounds tested (ANOVA, Tukey's post-hoc test, * $p < 0.05$, ** $p < 0.01$). (C) Dose-dependent caspase activation with AK3 and AK24 in the presence or absence of TNF was determined using the DEVD-AMC substrate. AK3 was significantly more active than AK24 at lower concentrations (* $p < 0.01$).