

Online Supplement

Combined activity of the redox-modulating compound Setanaxib (GKT137831) with cytotoxic agents in the killing of acute myeloid leukemia cells

Muhammed Burak Demircan^{1,2,3,4}, Peter C. Mgbacheta¹, Anne Kresinsky^{1,3}, Tina M. Schnoeder^{2,5}, Katrin Schröder⁶, Florian H. Heidel^{2,3,5} and Frank-D. Böhmer^{1*}

¹ Institute of Molecular Cell Biology, CMB, Jena University Hospital, 07745 Jena, Germany; ² Innere Medizin II, Hämatologie und Onkologie, Jena University Hospital, 07747 Jena, Germany; ³ Leibniz Institute on Aging—Fritz Lipman Institute, 07745 Jena, Germany; ⁴ Molecular Biotechnology and Gene Therapy, Paul-Ehrlich-Institut, 63225 Langen, Germany; ⁵ Innere Medizin C, Universitätsmedizin Greifswald, 17475 Greifswald, Germany; ⁶ Institute for Cardiovascular Physiology, Goethe University, 60590 Frankfurt am Main, Germany

*Corresponding author: Frank-D. Böhmer, Institute of Molecular Cell Biology, CMB, Jena University Hospital, Hans-Knöll-Strasse 2, 07745 Jena, Germany; Email i5frbo@uni-jena.de

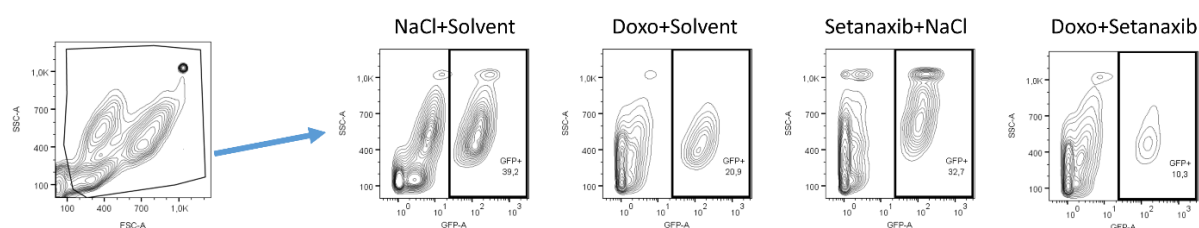


Figure S1. Analysis of GFP-positive FLT3-ITD expressing 32D cells in C3H/HeJ mice. Examples of dot-plots for FACS analysis of spleen cells corresponding to data shown in Figure 3B. Spleen cells were prepared as described in Materials and Methods (2.4). Left panel: Gating of cells by forward- and sideward-scatter profiles to exclude debris. Right panels: Detection of 32D-FLT3-ITD cells in the GFP channel. The control GFP+ (NaCl+Solvent) plot corresponds to the shown scatter plot. The other GFP+ plots are example measurements from animals treated with the compounds as indicated. Numbers for GFP+ in the right lower corner represent the percentage of GFP-positive cells.

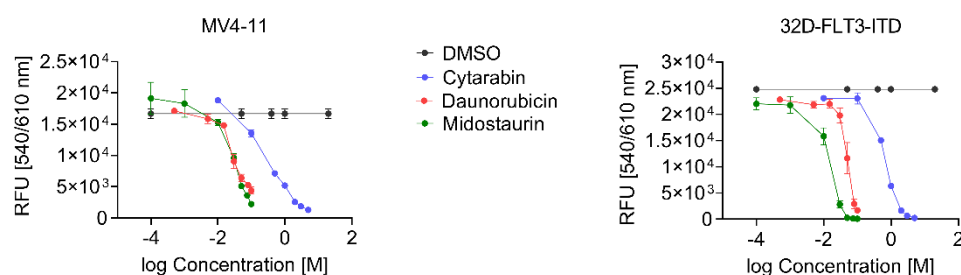


Figure S2. Effect of standard cytotoxic drugs on proliferation/viability of MV4-11 and 32D-FLT3-ITD cells. Cells were seeded in 96-well plates, compounds were added, and the proliferation/viability was assessed by Cell Titer Blue assay after 72 hours. The fluorescent signal, which was directly proportional to the number of viable cells, was measured in a plate reader at 540/610 nm (excitation/emission, respectively, RFU- relative fluorescence units).