

Supporting Information:

Identification of Novel Bisbenzimidazole derivatives as Anticancer Vacuolar (H⁺)-ATPase inhibitors†

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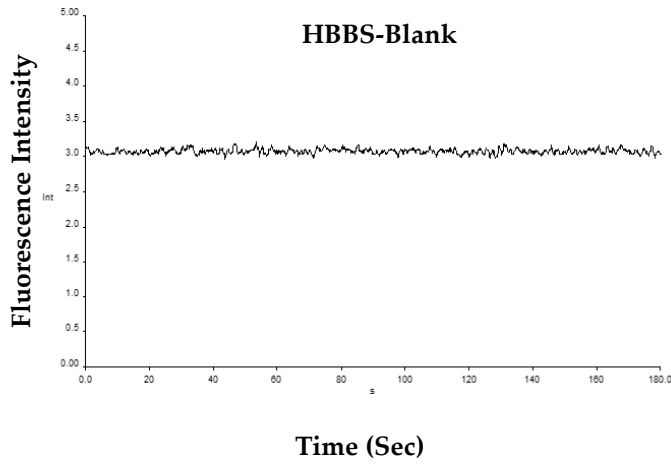
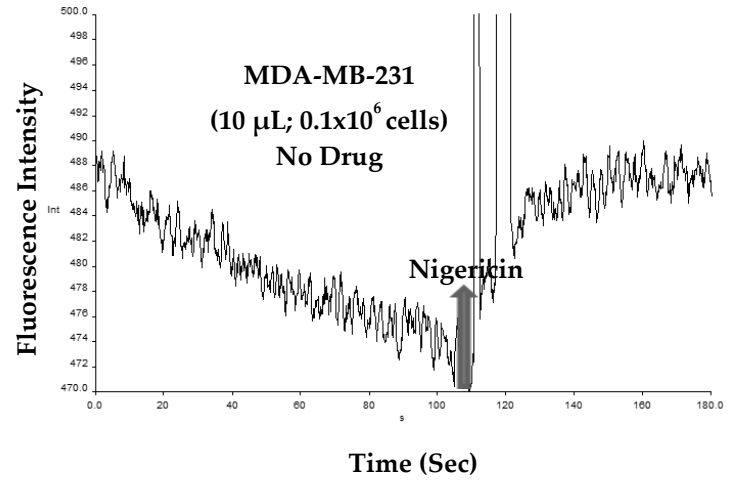
1A**1B**

Figure S1. Proton pump activity-Acridine orange (AO) fluorescence quenching method. Fluorescence intensity of Hank's Balanced Salt Solution (HBBS) was measured at an excitation 495 nm and an emission 540 nm (**1A**). Cells (MDA-MB-231) (0.1×10^6) were added to HBBS containing AO ($30 \mu\text{M}$) and AO fluorescence was measured (**1B**). Upright arrow designates the addition of Nigericin ($6 \mu\text{M}$) to collapse the proton (H^+) gradient and unquench the AO fluorescence.

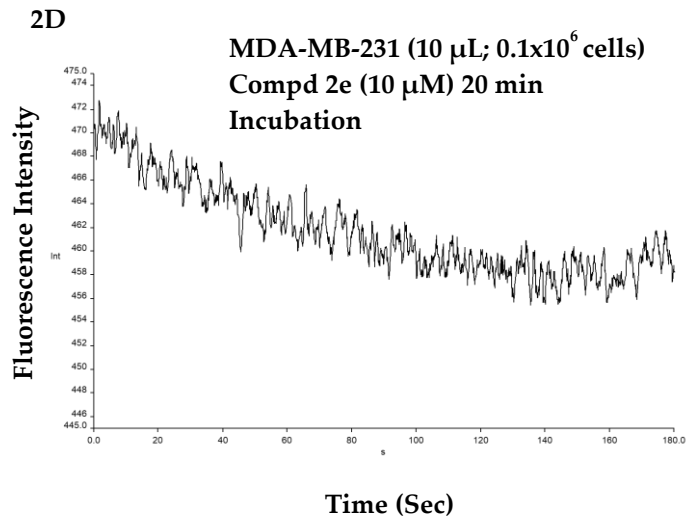
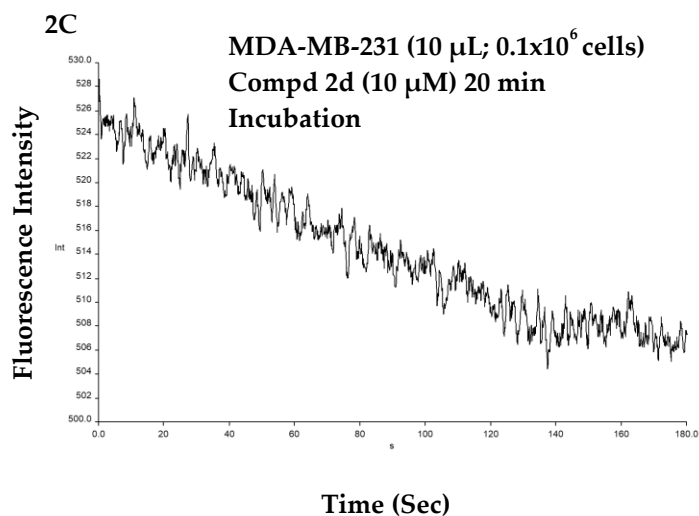
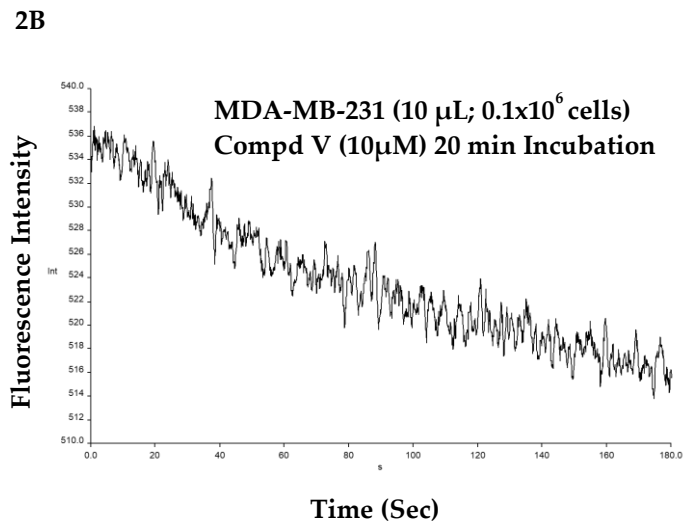
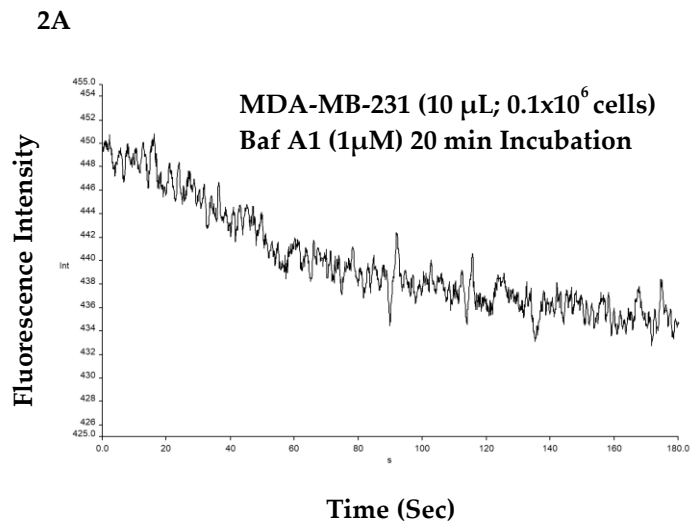


Figure S2. Effect of V-ATPase Inhibitors on Proton pump activity. Cells (MDA-MB-231) (0.1×10^6) were treated with V-ATPase inhibitor Baf A1 (1 μ M; Figure 2A), compounds V (10 μ M; Figure 2B), 2d (10 μ M; Figure 2C), 2e (10 μ M; Figure 2D) for 20 min followed by addition of AO (30 μ M). Fluorescence intensity at an excitation 495 nm and an emission 540 nm was measured.