

Figure S1. Proliferation assay of H1299 parental and VR500 cells. The cell number ratio was determined by absorbance measured using a Microplate Manager 6. Error bars represent the mean  $\pm$  standard deviation. VR, vinorelbine-resistant.

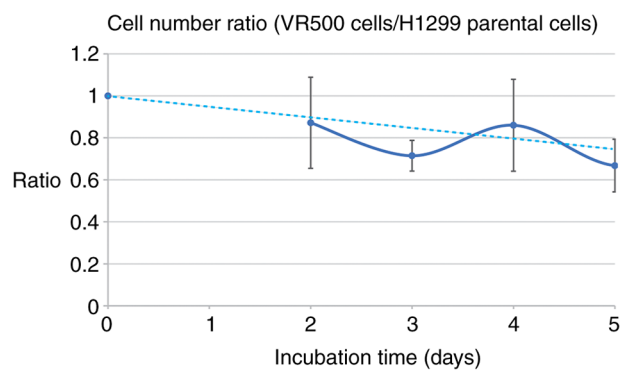


Figure S2. Detection of apoptotic markers in H1299 cells treated with vinorelbine. H1299 parental cells treated with or without 500 nmol/l vinorelbine and VR500 cells were cultured for 92 h. All lysates were immunoblotted with anti-caspase-3, anti-Bcl-2, and anti-cleaved caspase-3 antibodies.  $\beta$ -actin was used as a loading control. VR, vinorelbine-resistant; VNR, vinorelbine.

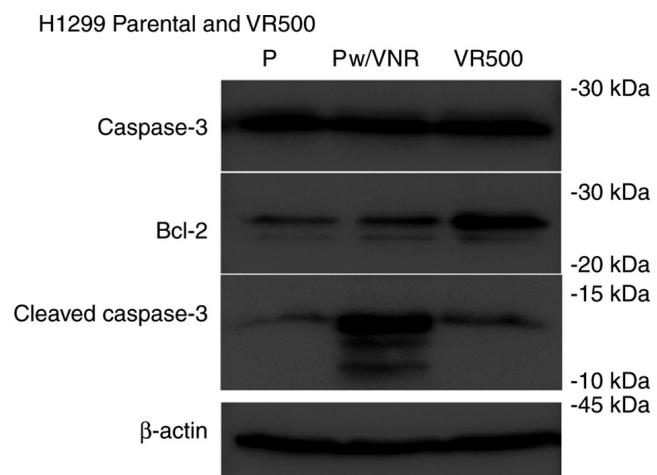


Figure S3. Comparison of MRP family with ABCB1 expression. Crude lysates obtained from H1299 parental, VR5, VR50 and VR500 were immunoblotted with anti-MRP1/ABCC1, anti-MRP2/ABCC2, anti-MRP3/ABCC3 and anti-ABCB1 antibodies.  $\beta$ -actin was used as a loading control. VR, vinorelbine-resistant; ABC, ATP-binding cassette.

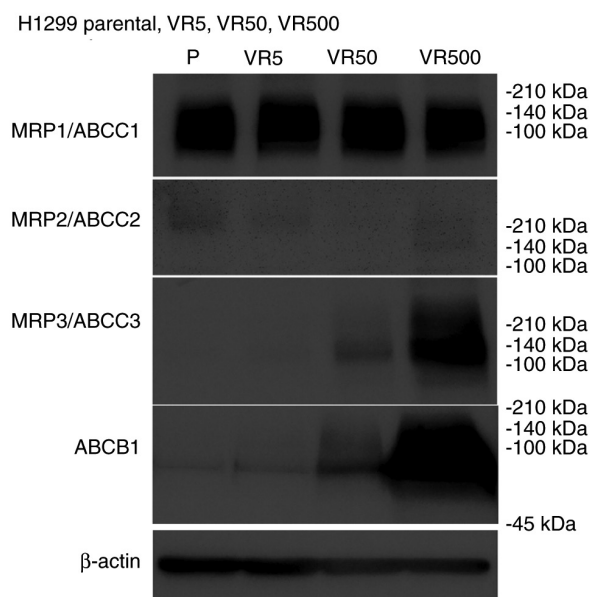


Figure S4. Detection of ABCB1, Nrf2, Fyn and p-Fyn in A549 parental cells and VR500 cells. A549 VR500 cells were established in the same manner as the H1299 VR500 cells. VR, vinorelbine-resistant; ABCB1, ABC subfamily B member 1; Nrf2, NF-E2-related factor 2; p-Fyn, phosphorylated Fyn.

A549 parental and VR500

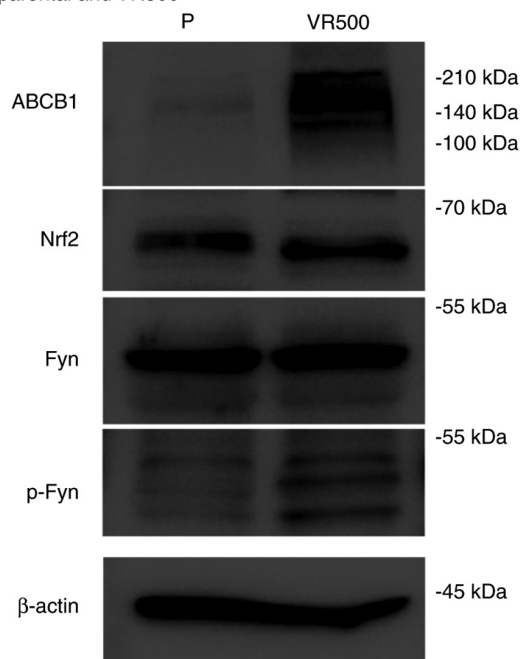


Figure S5. Quantification of dose-dependency of ABCB1 expression on Nrf2. The density of bands on the western blots was measured using ImageJ 1.53 software. VR, vinorelbine-resistant; ABCB1, ABC subfamily B member 1; Nrf2, NF-E2-related factor 2.

