Figure 4. P-glycoprotein expression of L₀, L₁₀₀ and L₁₀₀₀ cells. The P-glycoprotein was stained by anti-Pgp antibody and FITC-conjugated secondary antibody. The fluorescence intensity of FITC-conjugated secondary antibody control (red), L₀ cells (brown), L₁₀₀ cells (green) and L₁₀₀₀ cells (grey) was analyzed by flow cytometry.
Figure 5.  Nuclear morphology of L₀, L₁₀₀ and L₁₀₀₀ cells. Cells were collected onto slides using a cytopsin. The nuclear morphology was visualized by Wright Giemsa Stain. (a) L₀, (b) L₁₀₀ and (c) L₁₀₀₀ cells Bar = 5 μm.
Figure 6. Microtubular distribution of L0, L100 and L1000 cells. The MT was visualized by immunofluorescent staining using an anti-β-tubulin antibody and examined by a confocal microscope. (a) L0, (b) L100 and (c) L1000 Cells. Bar = 5 μm.
Figure 7. Western blot analysis of the tubulins extracted by taxol and the GTP-dependent method. The extracted proteins were separated by SDS-PAGE followed by Western blotting using anti-\(\alpha\) tubulin and anti-\(\beta\) tubulin antibodies. The tubulins were visualized by the chemi-luminescent technique. 10 \(\mu\)g of taxol extracted \(L_0\), \(L_{100}\) and \(L_{1000}\) lysates were loaded in lanes a, b and c, respectively. 10 \(\mu\)g of tubulin depleted extracts of \(L_0\) \(L_{100}\) and \(L_{1000}\) cells were loaded in lanes d, e and f, respectively. In lane g, 10 \(\mu\)g of total cellular proteins of \(L_{1000}\) cell was loaded. The tubulin bands were pointed out by the arrow.
Figure 8. Analysis of microtubules and microtubule-associated protein expression of L_0, L_{100} and L_{1000} cells using SDS-PAGE. The taxol and GTP-dependent extracted proteins of L_0, L_{100} and L_{1000} cells were separated by 12% SDS-PAGE and visualized by silver staining. The two arrows point to the 28 kDa and 31 kDa protein bands, respectively.
Figure 9. Two dimensional gel electrophoresis analysis of the microtubules and microtubule associated proteins of L0, L100 and L1000 cells. The taxol and GTP-dependent extracted proteins were separated by two-dimensional gel electrophoresis. Protein samples were separated by isoelectric focusing at pH 3-10 followed by separation by 8-18% SDS-PAGE. The proteins were visualized by silver staining. L0 cells (a), L100 cells (b) and L1000 cells (c). The proteins pointed out by arrows are the 28 kDa and 31 kDa proteins as described above.
Figure 10. Two-dimensional gel electrophoresis analysis of L1000 cells extracted in the absence of Mg^{2+}, GTP and taxol. The arrows point out the localizations of the 28 kDa and 31 kDa as described.
Figure 11. Western blot analysis of the tubulins extracted by immunoprecipitation using rabbit anti-α and anti-β tubulin antibodies. The extracted proteins were separated by SDS-PAGE followed by Western blotting using mouse anti-α and anti-β tubulin antibodies. The tubulins were visualized by chemi-luminescence techniques. The arrow points to the tubulin bands.
Figure 12. Analysis of immunoprecipitated microtubules and microtubule-associated proteins of $L_0$, $L_{100}$ and $L_{1000}$ cells. The cells were metabolically labeled with $^{35}$S-methionine. The extracted proteins were immunoprecipitated by using anti-tubulin antibodies. The microtubules and microtubule-associated proteins were separated by 12% SDS-PAGE and visualized by autoradiography. The arrow points to the 38 kDa protein band.
Figure 14. Nuclear morphology of $L_{100}$ and $L_{1000}$ cells after reversal of VCR resistance by cyclosporin A and verapamil. The cells were cultured with 10 $\mu$g/ml of cyclosporin A (a) and 10 $\mu$M verapamil (b) without VCR for 4 days followed by visualization of nuclei using the Wright Giesma Stain. Bar = 5 $\mu$m.
Figure 15. Microtubular distribution of L_{100} and L_{1000} cells after reversal of MDR by cyclosporin A and verapemil. The cells were cultured with 10 μg/ml cyclosporin A (a) and 10 μM verapemil (b) without VCR for 4 days followed by visualization of microtubules by immunofluorescent staining using an anti-β-tubulin antibody and examined by a confocal microscope. Bar = 5 μm.