

## *Appendix B*

Appendix B (CD) contains additional LSCM images and 3-dimensional animations of epirubicin and Oregon-green paclitaxel localisation in NSCLC cell lines.

## **Epirubicin**

### **1) Appendix B\Epirubicin\A549\A54910microMepirubicinANM.avi**

A549 cells were exposed to 10  $\mu\text{M}$  epirubicin for 120 minutes and imaged as in Section 2.11. A Z stack comprising of single scans taken at 0.24  $\mu\text{m}$  was compiled and turned into a 3-D animation. Cytoplasmic vesicles containing epirubicin were clearly visible.

### **2) Appendix B\Epirubicin\A549\A54910microMepirubicin OP.avi**

The Z stack comprising of single scans taken at 0.24  $\mu\text{m}$  in 1) was shown in orthographic projection. Cytoplasmic vesicles containing epirubicin were clearly visible.

### **3) Appendix B\Epirubicin\DLKP\DLKP10microMepirubicinANM.avi**

DLKP cells were exposed to 10  $\mu\text{M}$  epirubicin for 120 minutes and imaged as in Section 2.11. A Z stack comprising of single scans taken at 0.24  $\mu\text{m}$  was compiled and turned into a 3-D animation. Cytoplasmic vesicles containing epirubicin were **NOT** visible. (**discussed in Section 8.2.2**).

### **4) Appendix B\Epirubicin\DLKP-A\DLKPA 2microM epirubicin Control .tif**

DLKP-A cells were exposed to 2  $\mu\text{M}$  epirubicin for 120 minutes and imaged as in Section 2.11. A single scan was obtained. There was little cytoplasmic or nuclear localisation of epirubicin.

### **5) Appendix B\Epirubicin\DLKP-A\DLKPA 2microM epirubicin 10 microM Cyclosporin A Zm.tif**

DLKP-A cells were exposed to 2  $\mu\text{M}$  epirubicin and 10  $\mu\text{M}$  cyclosporin A for 120 minutes and imaged as in Section 2.11. A single scan was obtained. Cytoplasmic and nuclear localisation of epirubicin was increased. Cytoplasmic vesicles containing epirubicin were clearly visible (**discussed in Section 8.2.2**).

### **6) Appendix B\Epirubicin\DLKP-A\DLKPA 2microM epirubicin 100 microM Verapamil Zm.tif**

DLKP-A cells were exposed to 2  $\mu\text{M}$  epirubicin and 100  $\mu\text{M}$  verapamil for 120 minutes and imaged as in Section 2.11. A single scan was obtained. Cytoplasmic and nuclear localisation of epirubicin was increased. Cytoplasmic vesicles containing epirubicin were clearly visible (**discussed in Section 8.2.2**).

## **Oregon-green paclitaxel**

### **7) Appendix B\Oregon green paclitaxel\DLKP\DLKP 90 min exposure to 1 microM Oregon green paclitaxel 3D ANM.avi**

DLKP cells were exposed to 1  $\mu$ M Oregon-green paclitaxel for 90 minutes and imaged as in Section 2.11. A Z stack comprising of single scans taken at 0.24  $\mu$ m was compiled and turned into a 3-D animation.

### **8) Appendix B\Oregon green paclitaxel\DLKP\DLKP 90 min exposure to 1 microM Oregon green paclitaxel OP.avi**

The Z stack comprising of single scans taken at 0.24  $\mu$ m in 7) was shown in orthographic projection.

### **9) Appendix B\Oregon green paclitaxel\DLKP\ DLKP 180 min exposure to 1 microM Oregon green paclitaxel 3D ANM.avi**

DLKP cells were exposed to 1  $\mu$ M Oregon-green paclitaxel for 180 minutes and imaged as in Section 2.11. A Z stack comprising of single scans taken at 0.24  $\mu$ m was compiled and turned into a 3-D animation. **This is a 3-D animation of Figure 4.1.5 in Section 4.1.**

### **10) Appendix B\Oregon green paclitaxel\DLKP\ DLKP 180 min exposure to 1 microM Oregon green paclitaxel CS ANM.avi**

The single scans taken at 0.24  $\mu$ m intervals comprising the Z stack in 9) were shown in sequence as an animation. **This is an animation of Figure 4.1.5 in Section 4.1.**