

Supplementary Figure 1. Selectivity of doxorubicin (positive control) and AFD on human cancer cell lines - HCT116, MCF7 and A549. Selectivity index calculated as mean IC<sub>50</sub> value to non-cancer proximal tubule epithelial cells HK-2 versus IC<sub>50</sub> values to cancer cell line. The letters abc compare SI of cell lines treated with doxorubicin and xyz compare SI of cell lines treated with AFD. Means with different letters show statistical difference (P<0.05). SI value  $\geq 2$  indicates high selectivity.

and lung carcinoma (A549) cells.		
Extract/Fractions	MCF7	A549
Methanolic Crude	$3.18\pm0.54$	$5.33 \pm 0.66$
Partitions:		
Hexane	$6.79\pm3.08$	$9.11\pm0.84$
Ethyl Acetate	$0.77\pm0.16$	$1.97\pm0.21$
Aqueous	>100	>100
GCC Fractions:		
23	$0.25\pm0.03$	$0.32\pm0.1$
24	$0.83\pm0.09$	$0.89\pm0.07$
26	$7.16\pm0.83$	$6.96\pm0.5$
28	$2.58\pm0.48$	$2.87\pm0.21$
29	$0.88\pm0.18$	$1.09\pm0.15$
30	$0.26\pm0.02$	$0.95\pm0.14$
31	$0.17\pm0.004$	$0.34\pm0.04$
32	$0.26\pm0.03$	$0.88\pm0.19$
33	$0.33\pm0.01$	$0.76 \pm 0.29$
34	$0.5\pm0.07$	$1.58\pm0.64$
35	$3.77 \pm 1.35$	$6.32 \pm 1.92$
FC Fractions:		
FC9	$9.36 \pm 1.39$	$4.49 \pm 1.08$
FC10	$10.86 \pm 1.2$	$4.93 \pm 1.15$
SEC Fractions:		
SEC7	$11.09\pm2.7$	$7.22\pm2.96$
SEC8	$5.37 \pm 1.31$	$3.92\pm2.57$
HPLC:		
HPLC7/AFD	$4.06\pm0.21$	$7.57\pm0.21$
Doxorubicin	$0.65\pm0.25$	$0.4\pm0.09$

**Supplementary Table 1.** Cytotoxicity\* of *A. loheri* fractions as tested against breast adenocarcinoma (MCF7) and lung carcinoma (A549) cells.

\*IC<sub>50</sub> in  $\mu$ g/mL: concentration that inhibits cell viability by 50%.

Fractions selected in each fractionation process are in bold text. Doxorubicin was used as positive control. Values represent means  $\pm$  SD, n = 3.