Supporting Information

In vitro investigation of the cytotoxic and antiproliferative effects of *Haberlea rhodopensis* total extract: A comparative study

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Atanas Pavlov [2,3]*, and Nikolay T. Tzvetkov [1]

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A)

B)

Myconoside

IUPAC: (2R,3R,4R,5R,6R)-4-(((2S,3R,4R)-3,4-dihydroxy-4-(hydroxymethyl)tetrahydrofuran-2-yl)oxy)-2-((((2R,3R,4R)-3,4-dihydroxy-4-(hydroxymethyl)tetrahydrofuran-2-yl)oxy)methyl)-6-(3,4-dihydroxyphenethoxy)-5-hydroxytetrahydro-2H-pyran-3-yl 3-(3,4-dihydroxyphenyl)propanoate
$C_{33}H_{44}O_{19}$
MW 744.70

Paucifloside

IUPAC : (2R,3R,4R,5R,6R)-4-(((2S,3R,4R)-3,4-dihydroxy-4-(hydroxymethyl)tetrahydrofuran-2-yl)oxy)-2-((((2R,3R,4R)-3,4-dihydroxy-4-(hydroxymethyl)tetrahydrofuran-2-yl)oxy)methyl)-6-(3,4-dihydroxyphenethoxy)-5-hydroxytetrahydro-2H-pyran-3-yl (E)-3-(3,4-dihydroxyphenyl)acrylate
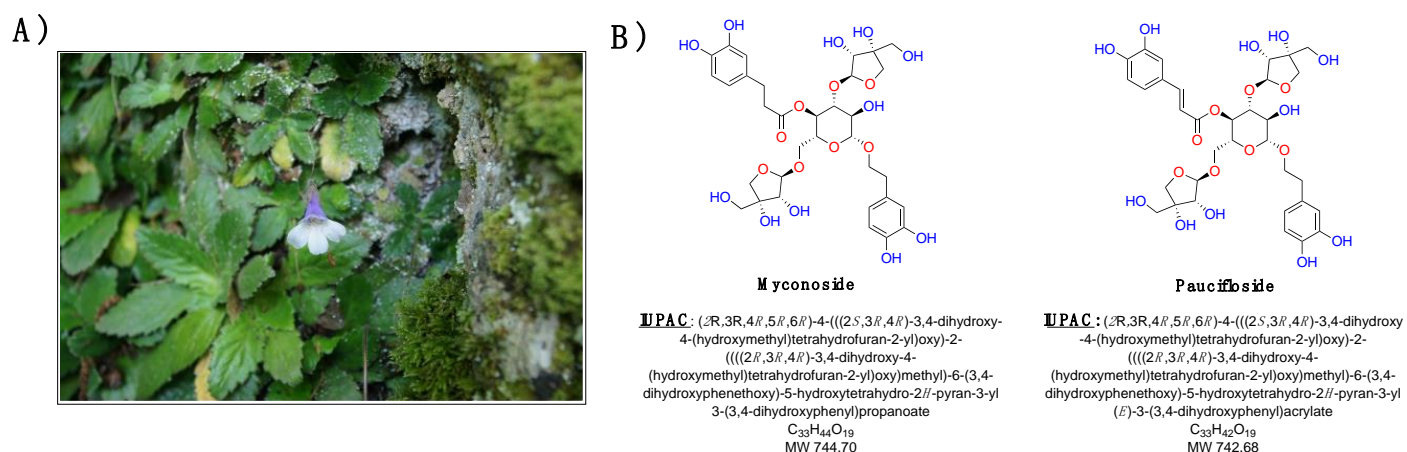$C_{33}H_{42}O_{19}$
MW 742.68

Figure S1. A) The plant *Habelea rhodopensis* Friv.. **B)** Chemical structures and IUPAC names of the main constituents of *H. rhodopensis* Friv. myconoside and paucifloside.

Table S1. Transformation of doxorubicin concentrations (from μM to μg/mL).

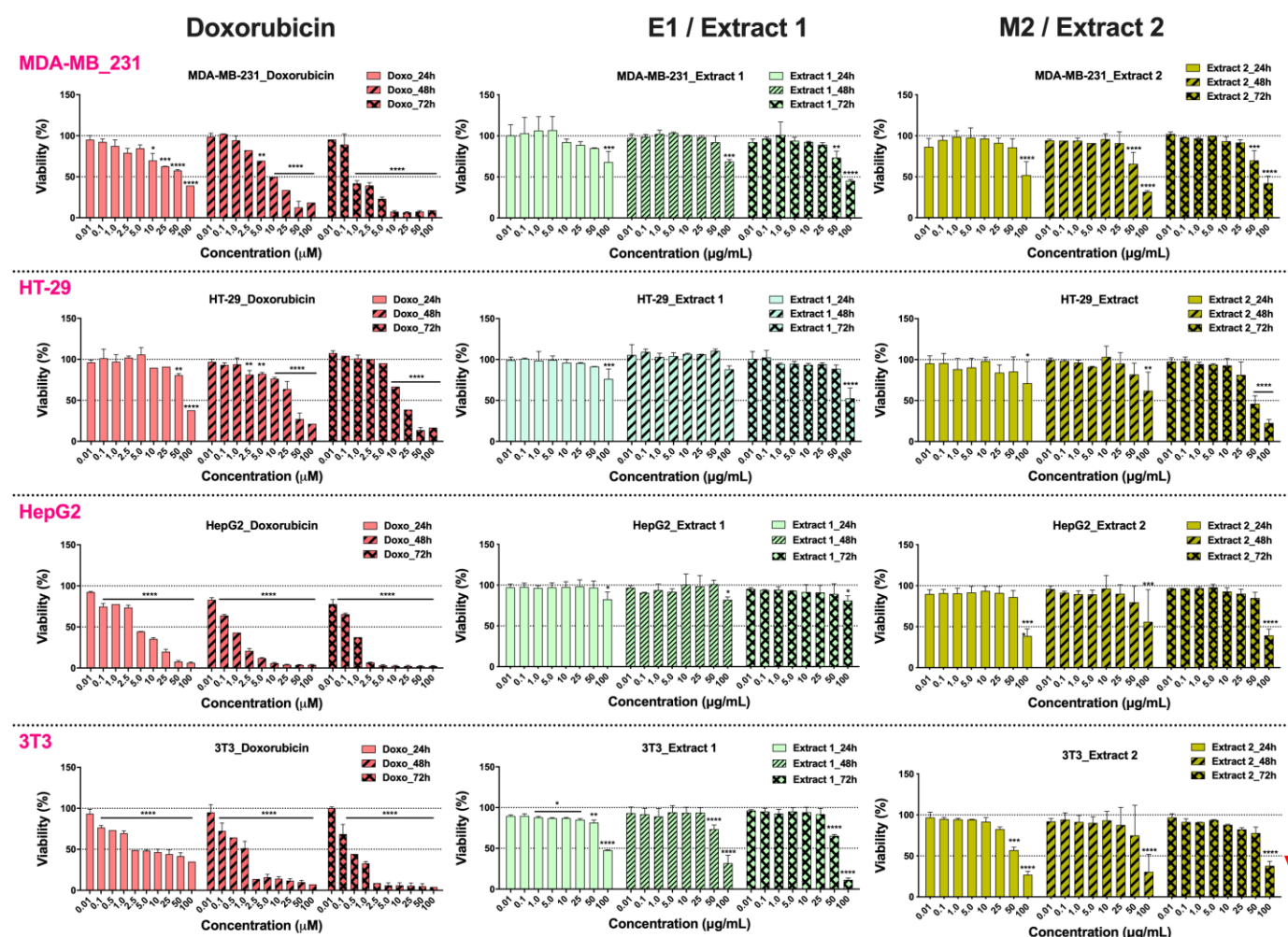| Doxorubicin (MW 543.52 g/mol)			
μM	μg/mL	μM	μg/mL
100	54.352	2.5	1.359
50	27.176	1.0	0.544
25	13.588	0.1	0.054
10	5.435	0.01	0.005
5.0	2.718	–	–

Figure S2. Comparison of the cytotoxicity profile for doxorubicin (left), Extract 1 (middle), and Extract 2 (right) measured on MDA-MB-231, HT-29, and HepG2 cancer cells as well as on 3T3 non-cancer cells after 24-, 48-, and 72-hours exposure to different concentrations of compounds (0.01 to 100 μM for doxorubicin; 0.01 to 100 μg/mL for Extract 1 and 2). The respective substance concentrations are indicated. For simplification, the red arrow (right) showed the determined trend in inhibitory activity for extract 2, determined at its highest tested concentration of 100 μg/mL. Untreated (control, Ctrl.) cells were used as a positive control. The results are expressed as the mean % of untreated controls ± SD (n = 3). Statistical analysis was performed by one-way ANOVA and Dunnett's multiple comparison test. *, $p < 0.1$; **, $p < 0.01$; ***, $p < 0.001$; ****, $p < 0.0001$ *vs.* control.