

## SUPPLEMENTARY MATERIAL

# 16-Hydroxy-Lycopersene, a Polyisoprenoid Alcohol Isolated from *Tournefortia hirsutissima*, Inhibits Nitric Oxide Production in RAW 264.7 Cells and Induces Apoptosis in Hep3B Cells

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## List of content

**Figure S1.** Effect of extracts of n-hexane (Th-H), dicloromethane (Th-D) and hydroalcoholic (Th-D) from leaves of *Tournefortia hirsutissima* at 1 mg/ear dose on the edema in mice ear induced by TPA.

**Figure S2.** Inhibition of the NO production in LPS-stimulated RAW 264.7 cells by Th-H, Th-D, Th-HA, F4, F4-1, F4-2, and F4-4 to indicated doses.

**Figure S3.** Effect of Th-H, Th-D, Th-HA, F4, F5, F4-1, F4-2, and F4-4 to indicated doses on cell viability of RAW 264.7 cells by using MTS assay.

**Figure S4.** Analysis of F4-2-1 by using GC/MS. The most abundant component in this fraction was bis (2-ethylhexyl) phthalate with a percentage of 55.84%.

**Figure S5.** Chromatogram of F4-2-2 by using analytical HPLC, monitored at 210 nm using Merck column (Performance RP-18e, 100 x 4.6 mm).

**Figure S6.** <sup>1</sup>H NMR spectrum (500 MHz, benzene-*d*<sub>6</sub>) of compound 1.

**Figure S7.** <sup>1</sup>H NMR spectrum expansions (500 MHz, benzene-*d*<sub>6</sub>) of compound 1.

**Figure S8.** DEPTQ NMR spectrum (125 MHz, benzene- $d_6$ ) of compound **1**.

**Figure S9.**  $^1\text{H}$  -  $^1\text{H}$  COSY spectrum (benzene- $d_6$ ) of compound **1**.

**Figure S10.** TOCSY spectrum (benzene- $d_6$ ) of compound **1**.

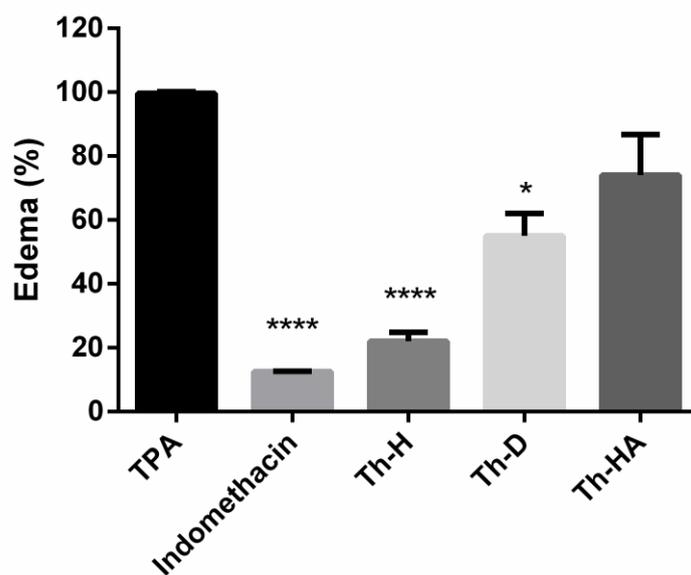
**Figure S11.** HSQC spectrum (benzene- $d_6$ ) of compound **1**.

**Figure S12.** HMBC spectrum (benzene- $d_6$ ) of compound **1**.

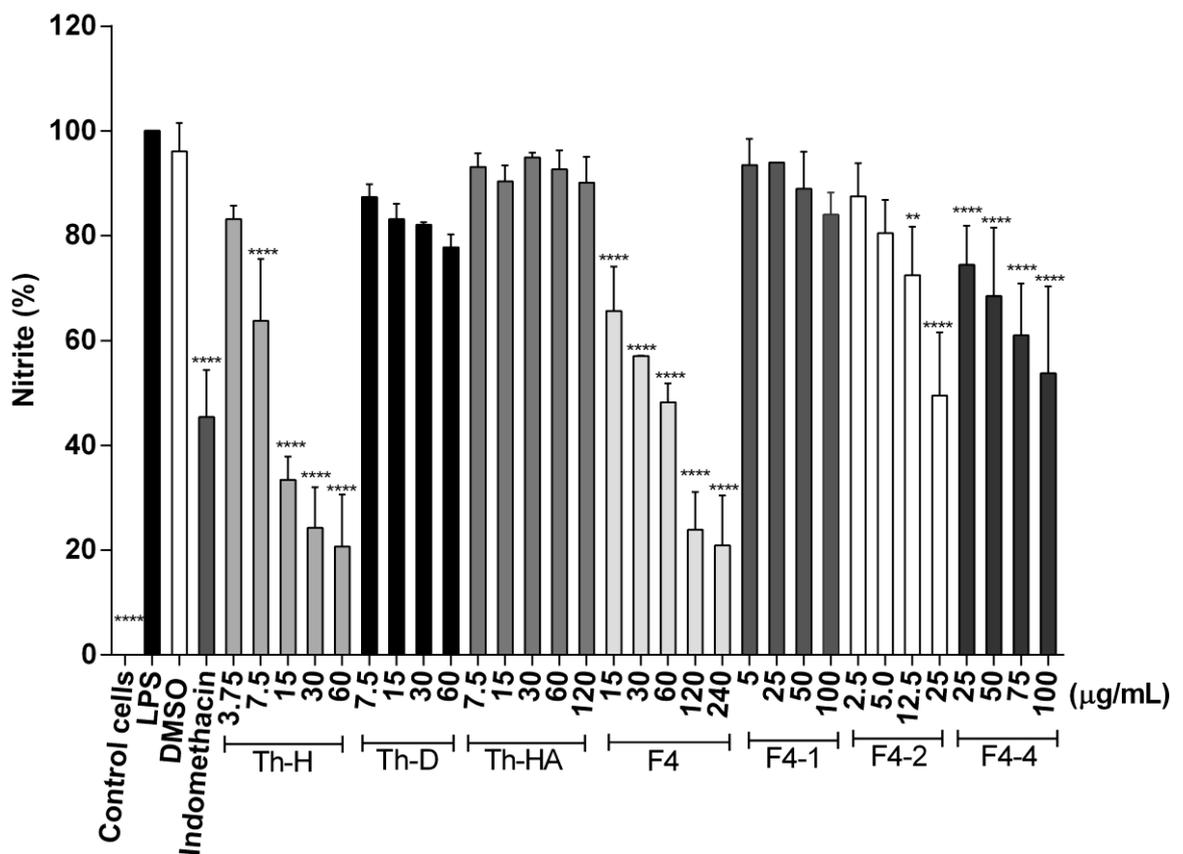
**Figure S13.**  $^1\text{H}$  NMR spectrum (500 MHz, pyridine- $d_5$ ) of (*S*)-MTPA ester of **1** (**1a**).

**Figure S14.**  $^1\text{H}$  NMR spectrum (500 MHz, pyridine- $d_5$ ) of (*R*)-MTPA ester of **1** (**1b**).

**Figure S15.** The cell cycle of (A) Hep3B, (B) HepG2, (C) PC3 and (D) HeLa cells by flow cytometry treated with **1** to its  $\text{CI}_{50}$  and PTX 10 nM.

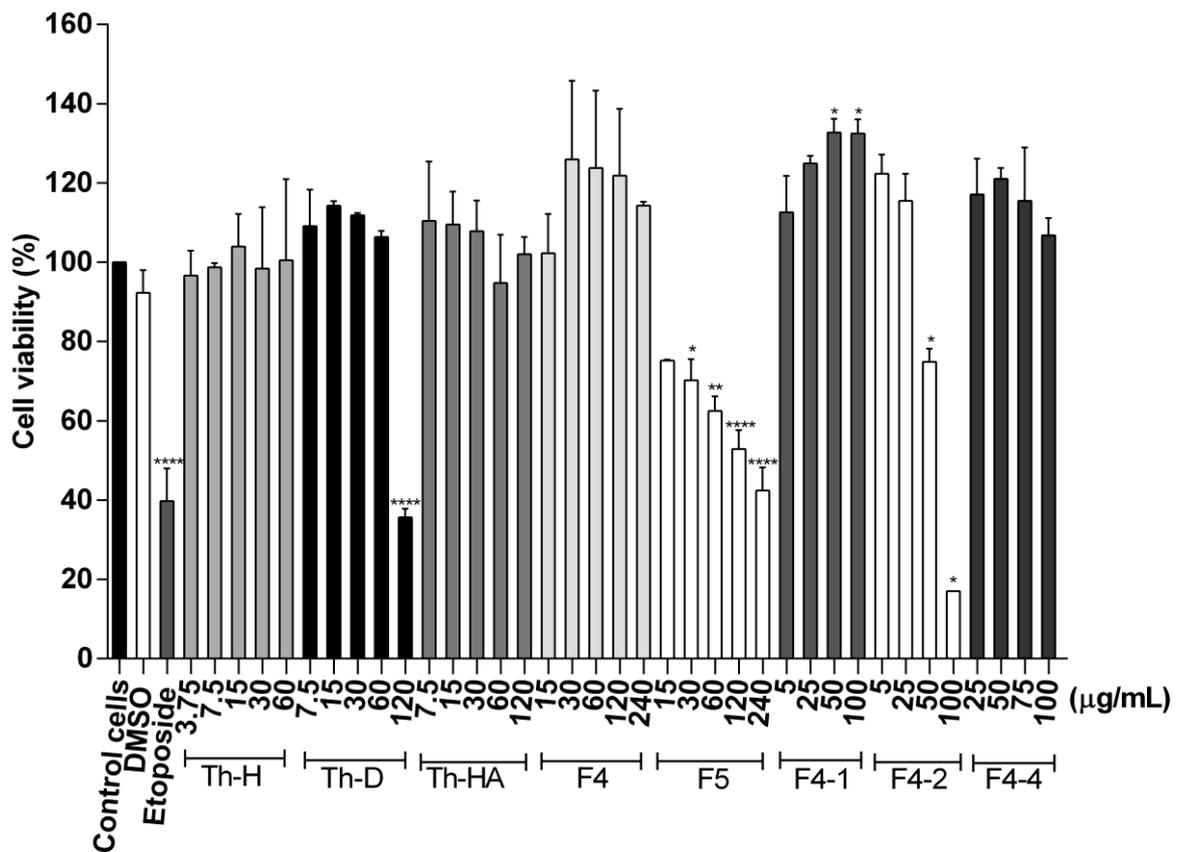


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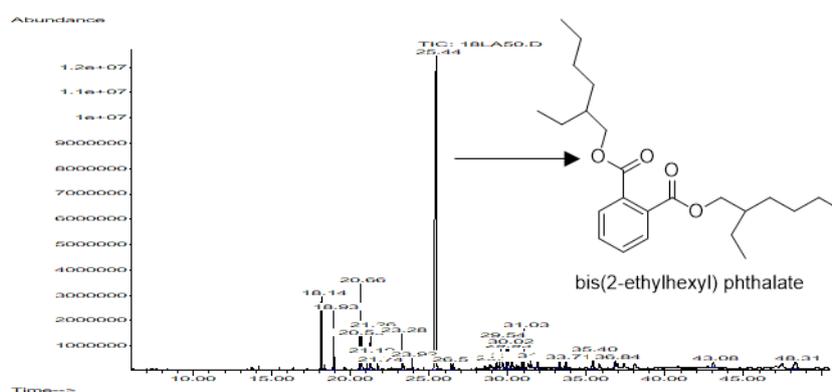
**Figure S2.** Inhibition of the NO production in LPS-stimulated RAW 264.7 cells by Th-H, Th-D, Th-HA, F4, F4-1, F4-2, and F4-4 to indicated concentrations. Cells were treated with the investigated samples, DMSO (0.4%, v/v) or indomethacin (30  $\mu\text{g/mL}$ ) 2 h before stimulation with LPS (1.0  $\mu\text{g/mL}$ ). The nitrite concentration was determined by Griess

method and is expressed in percentage. All data represent the mean  $\pm$  standard deviation of at least three independent experiments performed by triplicate. Statistical significance was determined by one-way ANOVA followed by Dunnett's test. \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$  and \*\*\*\*  $P < 0.0001$  compared with LPS group.

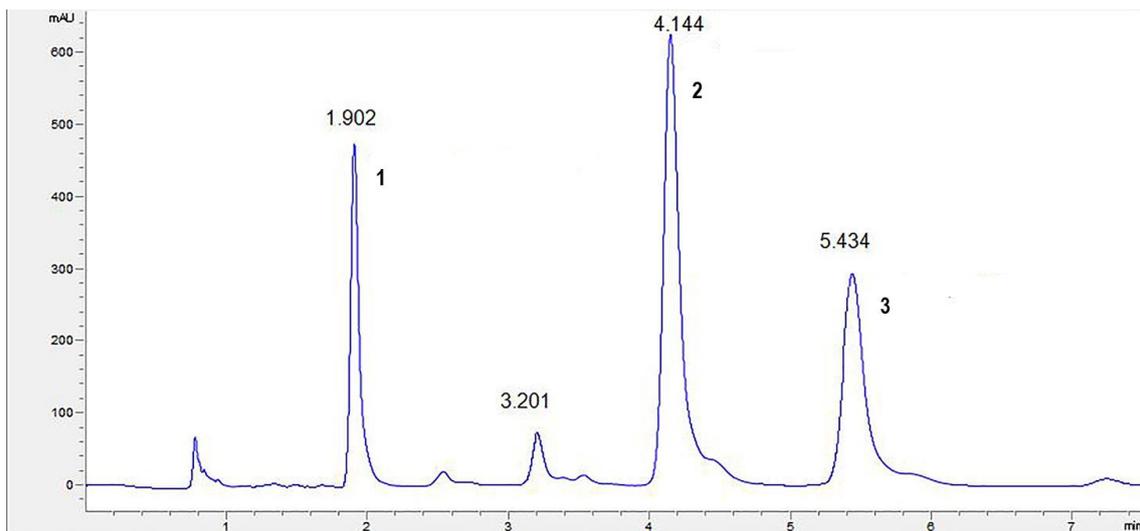


**Figure S3.** Effect of Th-H, Th-D, Th-HA, F4, F5, F4-1, F4-2, and F4-4 to indicated concentrations on cell viability of RAW 264.7 cells by using MTS assay. Cell viability is expressed in percentage. All data represent the mean  $\pm$  standard deviation of at least three independent experiments performed by triplicate. Statistical significance was

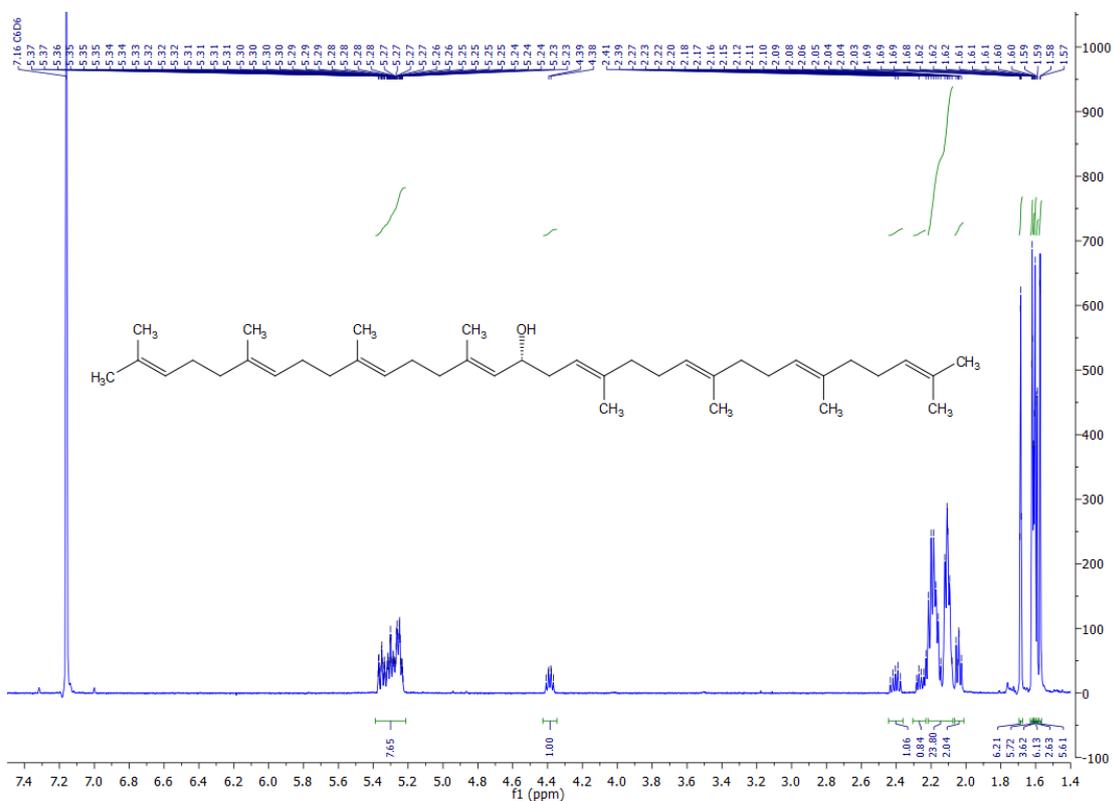
determined by one-way ANOVA followed by Dunnett's test. \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$  and \*\*\*\*  $P < 0.0001$  compared with control cells group (without treatment).



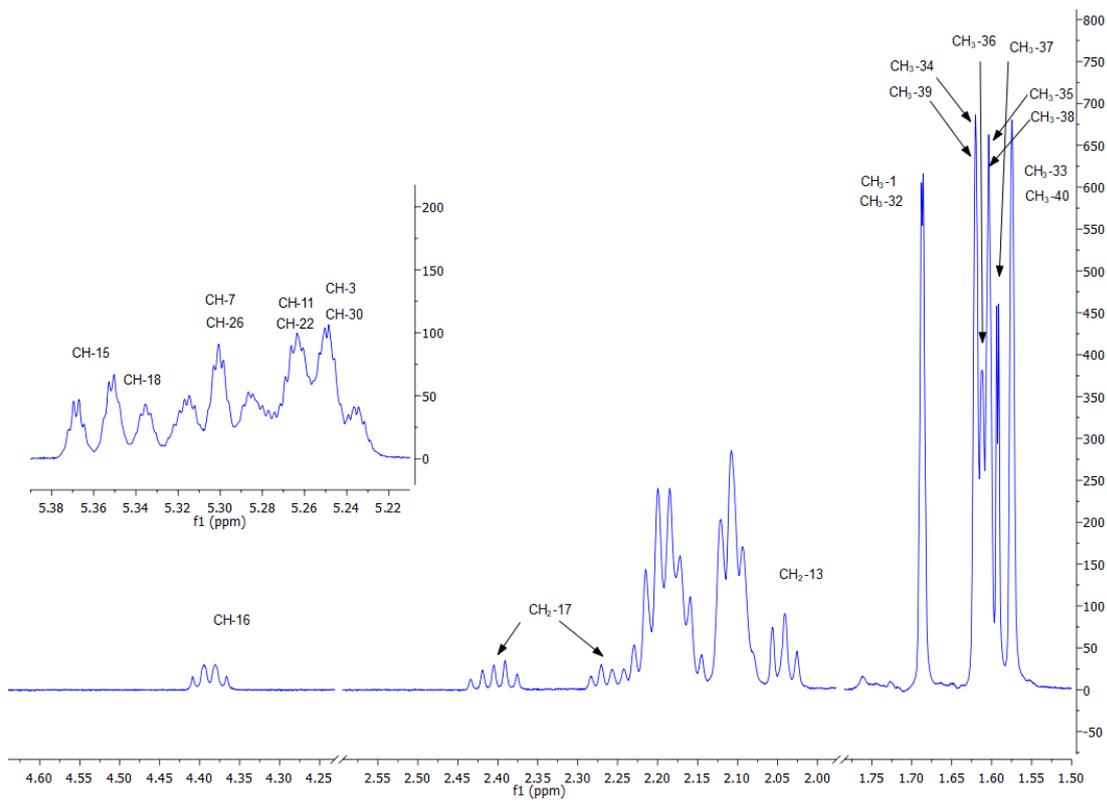
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**Figure S5.** Chromatogram of F4-2-2 by using analytical HPLC, monitored at 210 nm using Merck column (Performance RP-18e, 100 x 4.6 mm). The mobile phase consisted of a gradient of iPrOH : MeOH : H<sub>2</sub>O (30 : 67 : 03 to 30 : 70 : 00, v/v). Flow rate was 2.0 mL/min and sample injection of 7  $\mu$ L (1.5 mg/mL). The peaks with retention times at 1.90, 3.20 and 4.14 min correspond to **1**, **2** and **3**, respectively.



**Figure S6.** <sup>1</sup>H NMR spectrum (500 MHz, benzene-*d*<sub>6</sub>) of compound **1**.



**Figure S7.**  $^1\text{H}$  NMR spectrum expansions (500 MHz,  $\text{benzene-}d_6$ ) of compound **1**.

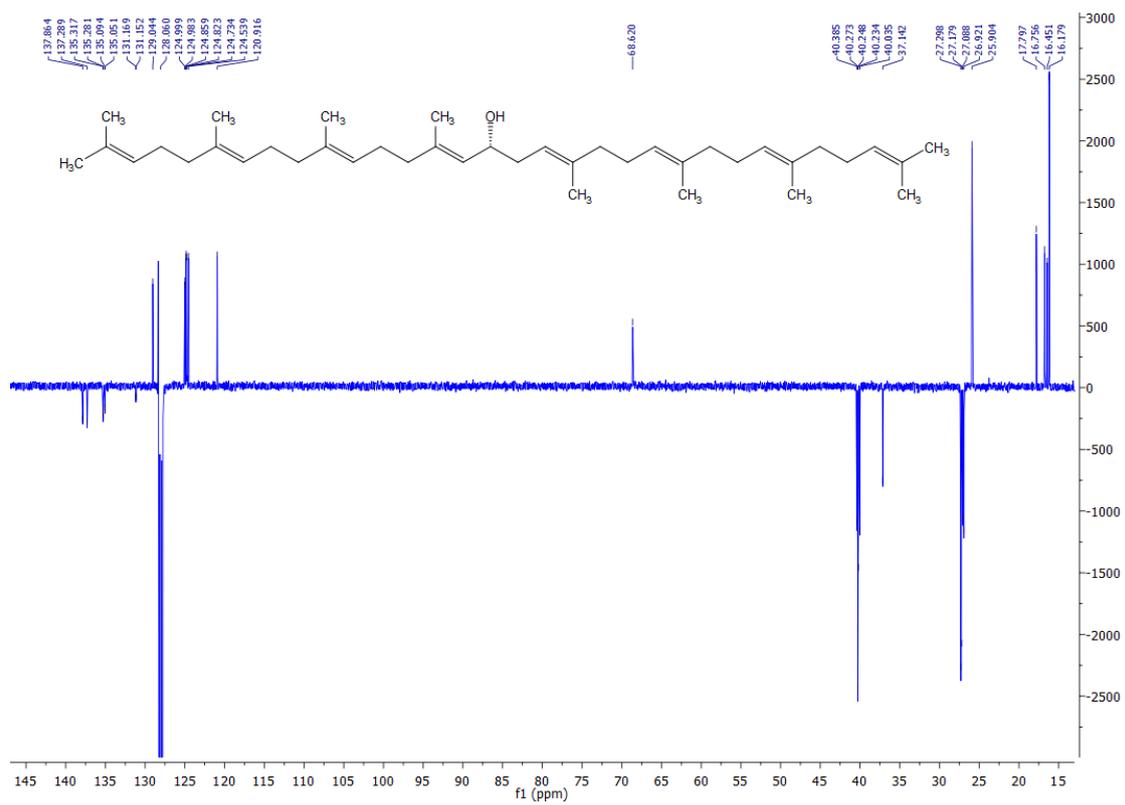
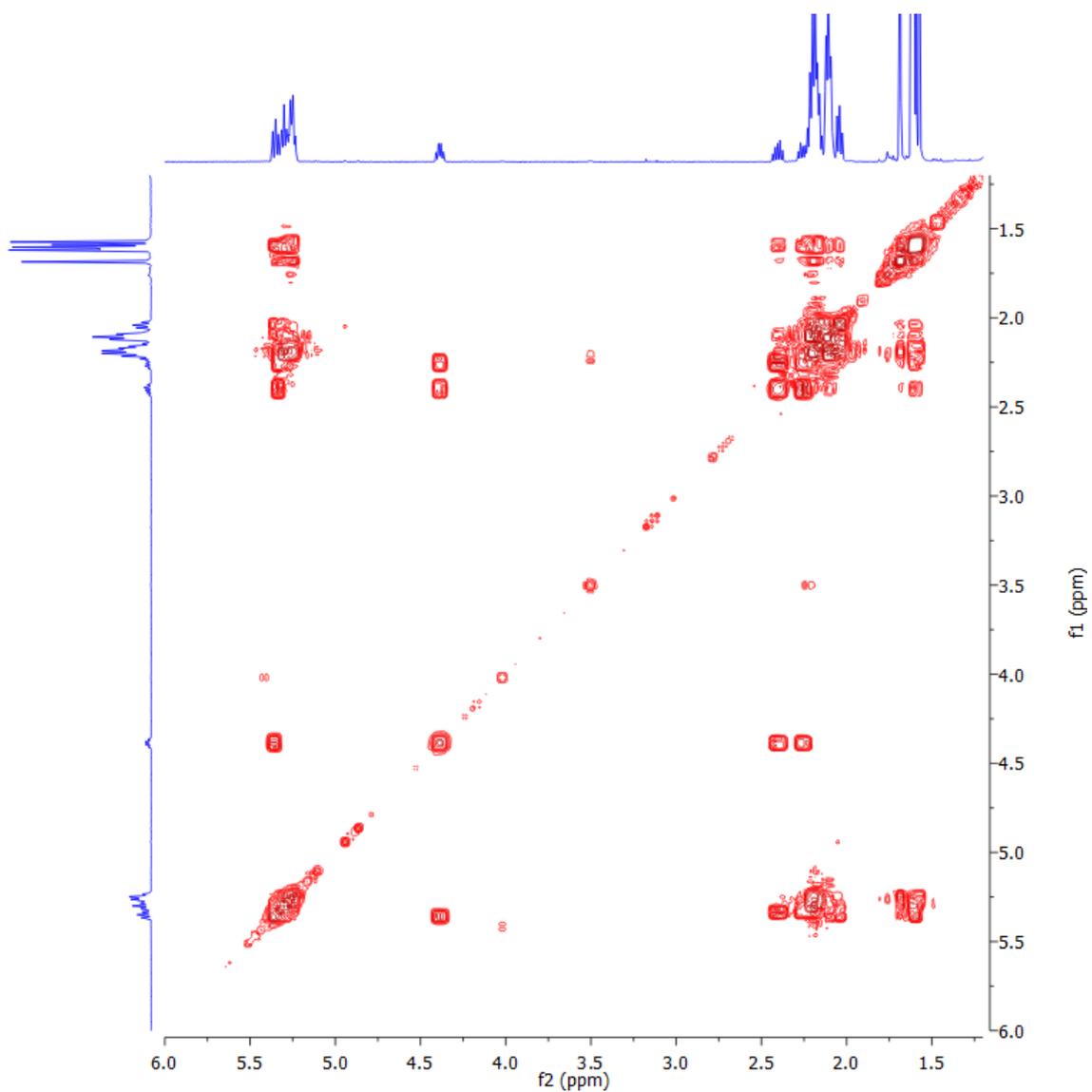
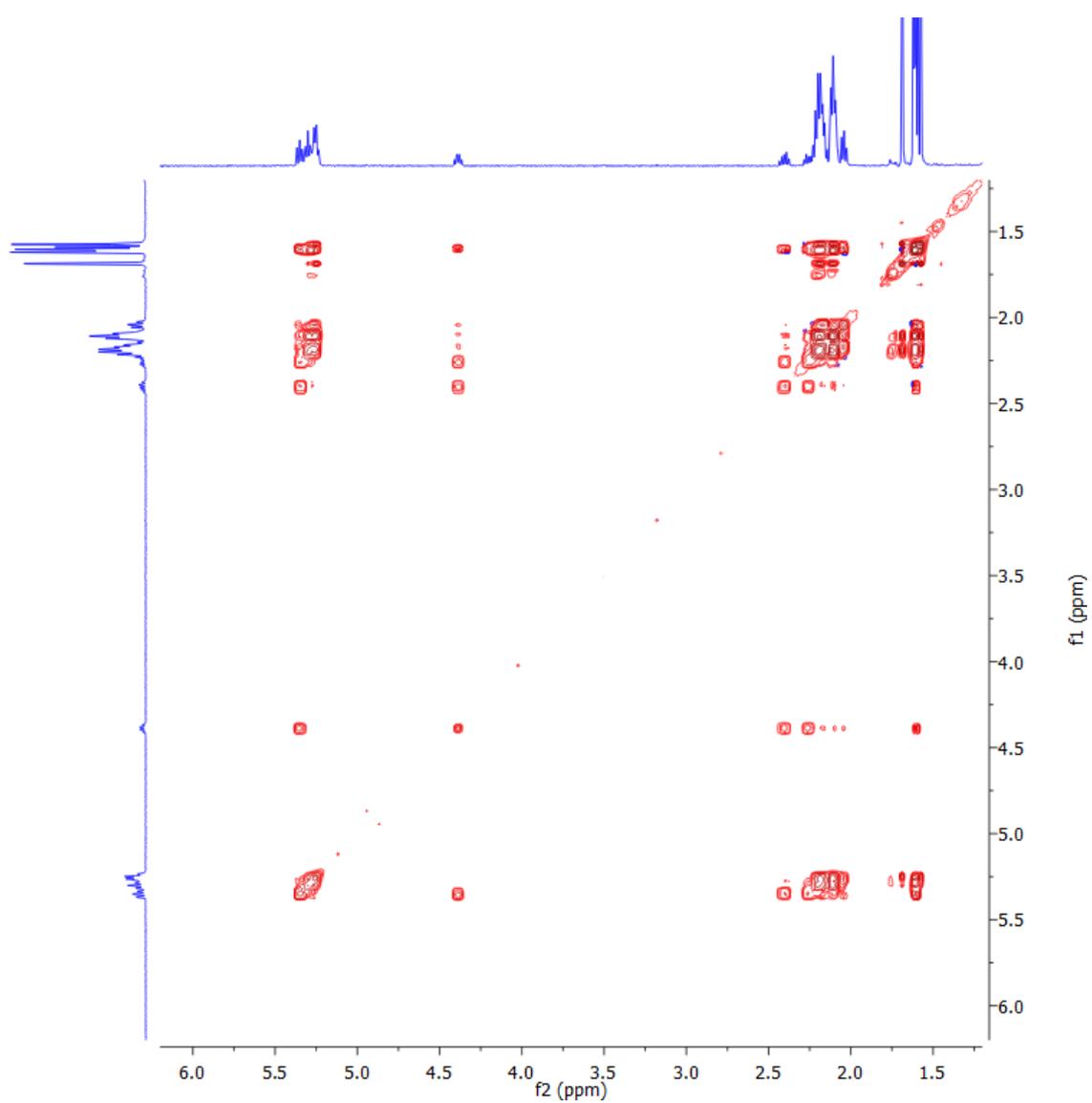


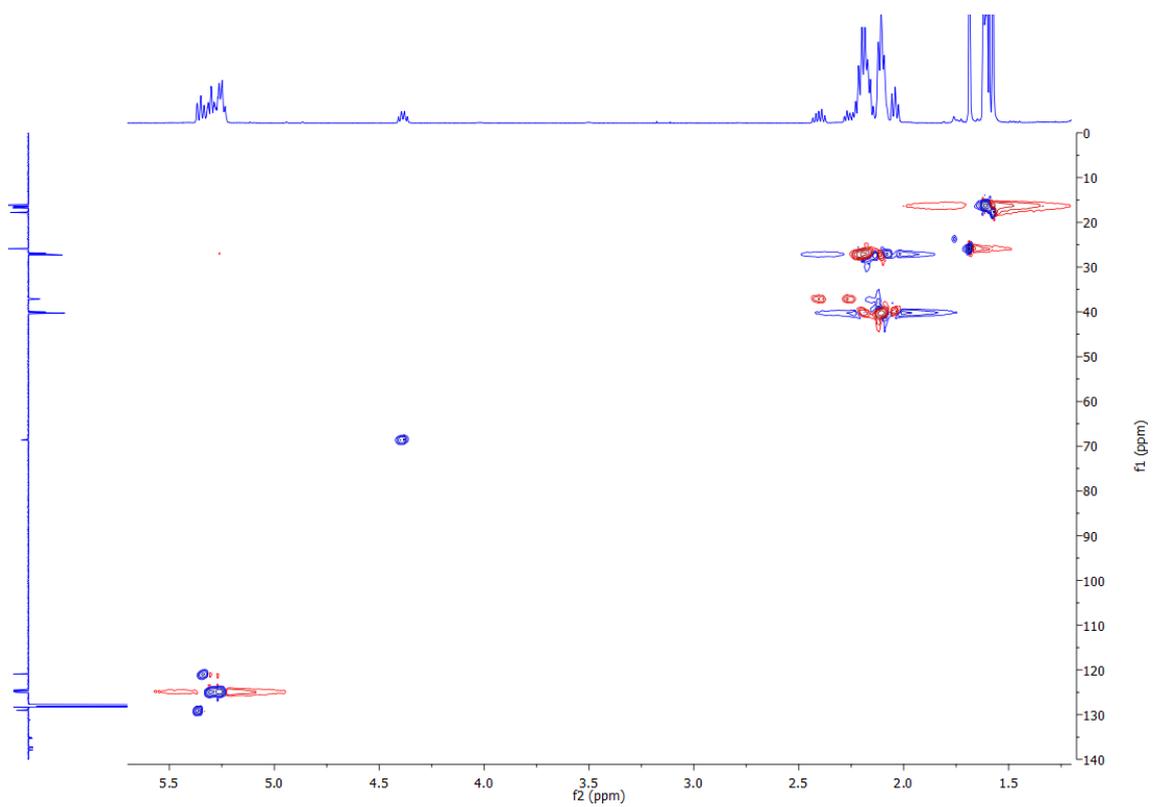
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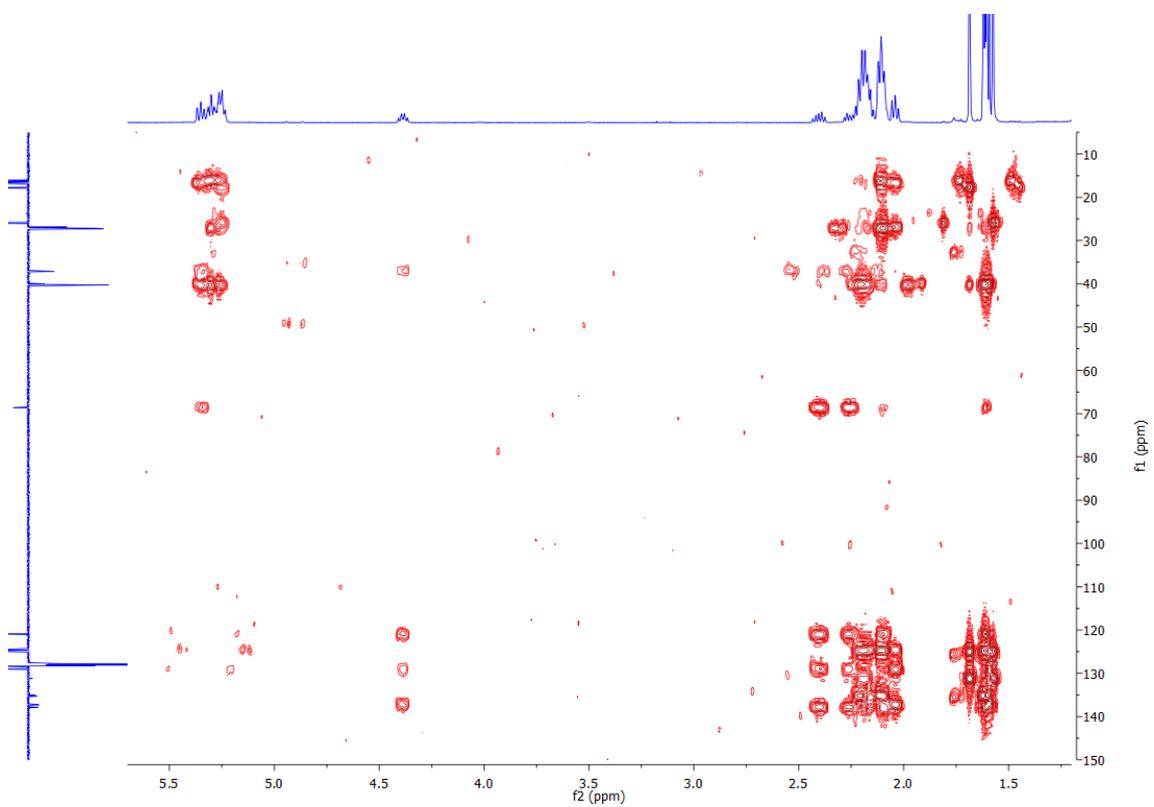
**Figure S9.**  $^1\text{H}$  -  $^1\text{H}$  COSY spectrum (benzene- $d_6$ ) of compound **1**.



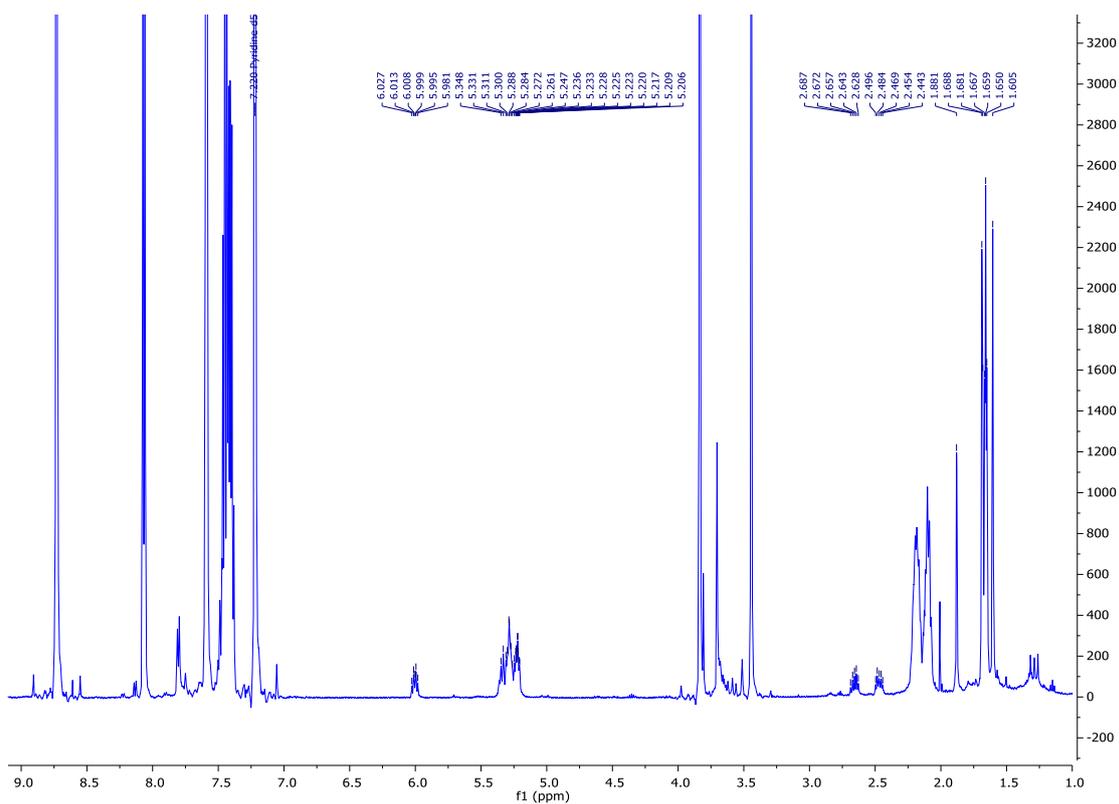
**Figure S10.** TOCSY spectrum (benzene- $d_6$ ) of compound **1**.



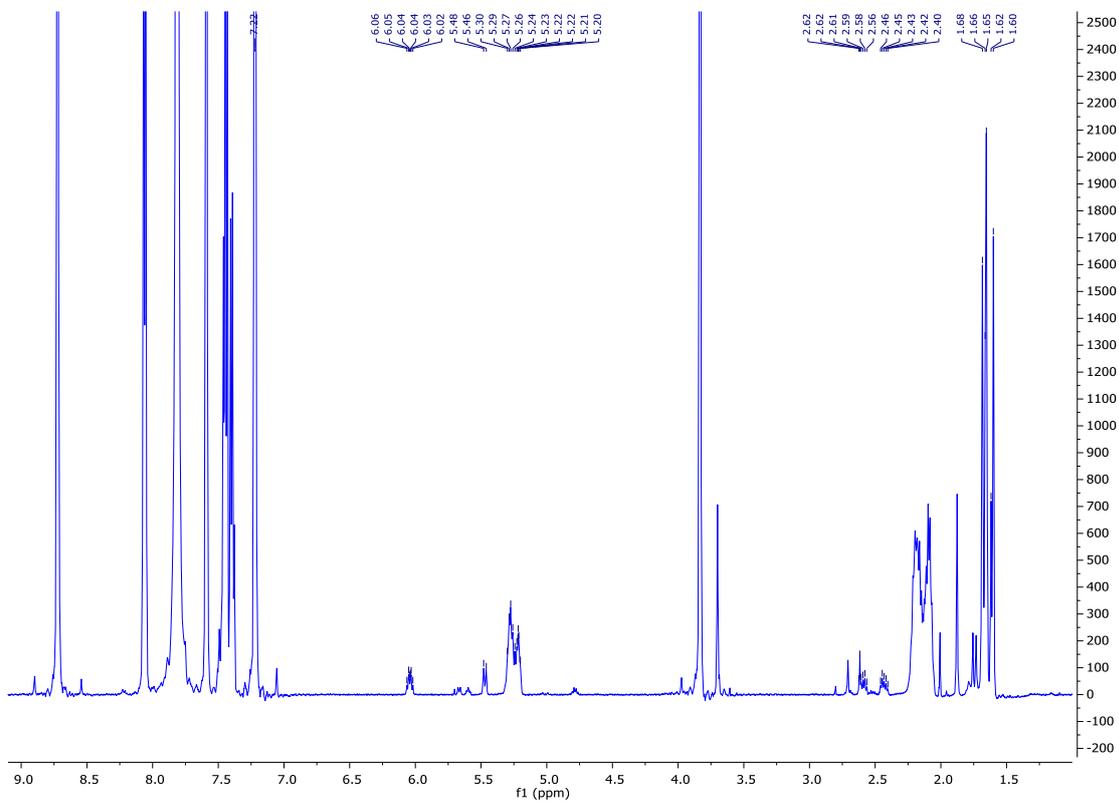
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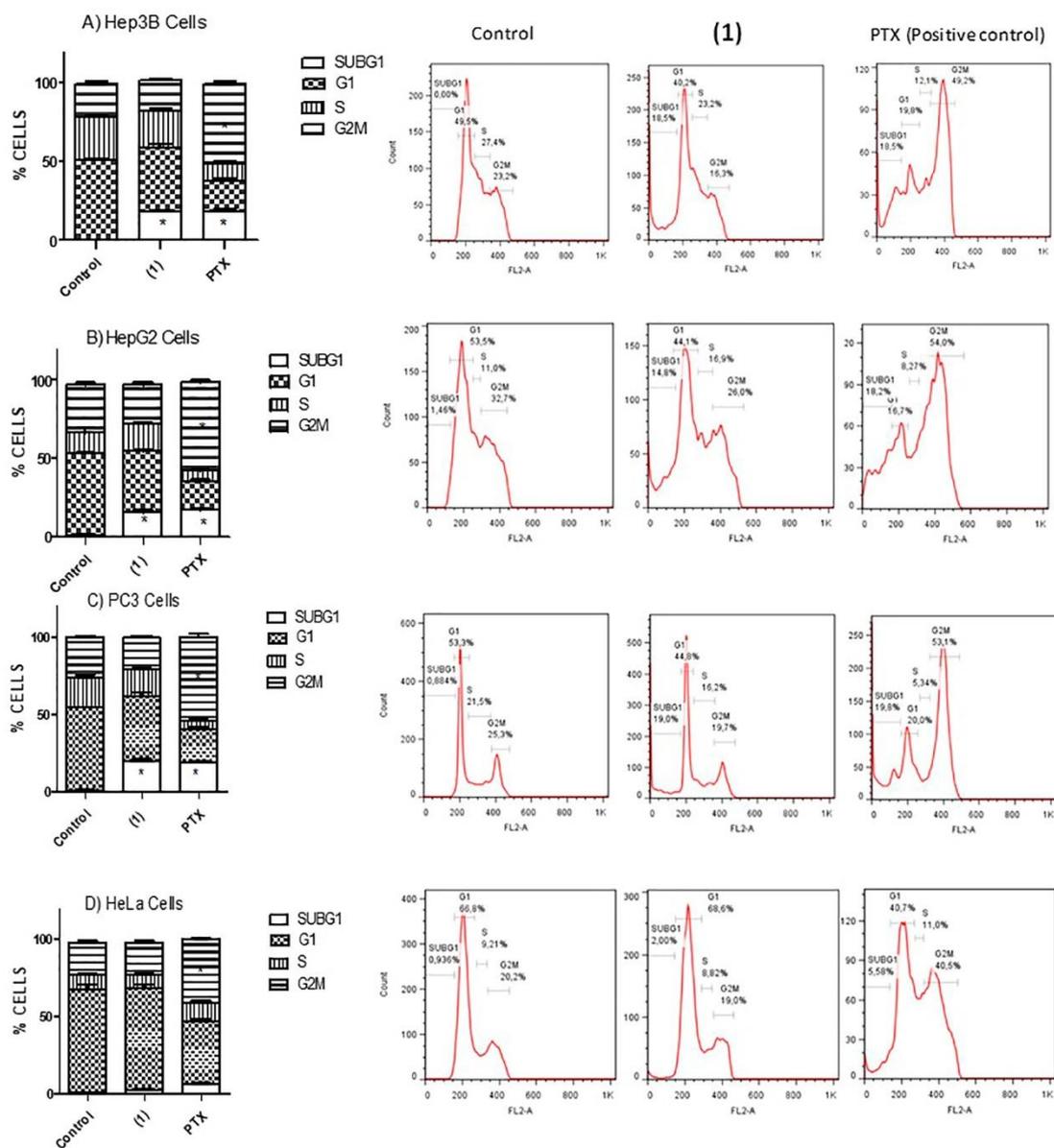
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**Figure S15.** The cell cycle of (A) Hep3B, (B) HepG2, (C) PC3 and (D) HeLa cells by flow cytometry treated with **1** to its IC<sub>50</sub> and PTX 10 nM. The data are the means ± D.E. of three independent experiments. Statistical significance was determined by one-way ANOVA followed by Dunnett's test. \*  $P < 0.05$  compared to the non-treated control.