Supporting Information

Plant Extracts of the Family Lauraceae: A Potential Resource for Chemopreventive Agents that Activate the Nuclear Factor-Erythroid 2-Related Factor 2/Antioxidant Response Element Pathway

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![Chemical Structure](image)

**Chemical Formula:** $C_6H_{11}NOS_2$
**Exact Mass:** 177.0282

*Fig. 1S* The chemical structure of the positive control SF.
Fig. 2S Cell viability of MDA-MB-231 cells treated with the plant extracts from the family Lauraceae. The stable MDA-MB-231 cells were seeded in 96-well plates, and treated with several doses of each plant extract (μg/mL) for 16 hours. Results are presented as the mean ± SD (n = 3).
Fig. 3S The thin-layer chromatography (TLC) of cinnamaldehyde (1.0 μg/spot, track 4) and the active plant extracts *L. garrettii* (**ZK-08**, 50 μg/spot, track 1), *C. chartophyllum* (**ZK-02**, 50 μg/spot, track 2), *C. mollifolium* (**ZK-04**, 50 μg/spot, track 3), *C. camphora* var. *linaloolifera* (**ZK-05**, 50 μg/spot, track 5), and *C. burmannii* (**ZK-10**, 50 μg/spot, track 6). The developing solvent was petroleum ether-EtOAc (9:1). TLC plates were visualized at 254 nm.

Fig. 4S The thin-layer chromatography (TLC) of the active plant extracts *L. garrettii* (**ZK-08**, 50 μg/spot, track 1), *C. chartophyllum* (**ZK-02**, 50 μg/spot, track 2), *C. mollifolium* (**ZK-04**, 50 μg/spot, track 3), *C. camphora* var. *linaloolifera* (**ZK-05**, 50 μg/spot, track 4), and *C. burmannii* (**ZK-10**, 50 μg/spot, track 5). The plant extracts were subjected to a Sephadex LH-20 column chromatography eluted with CH₂Cl₂-CH₃OH (1:1) for depigmentation before TLC analysis. The developing solvent for TLC analysis was petroleum ether-acetone (3:1). TLC plates were visualized at 254 nm (**A**), 365 nm (**B**), and 10% H₂SO₄-EtOH followed by heating (**C**).
Material and Methods

TLC chromatography was performed on precoated silica gel GF254 plates from Qingdao Ocean Company. Cinnamaldehyde (Cat. No. W228613) was purchased from Sigma. Sephadex LH-20 was purchased from GE Healthcare.

Depigmentation of plant extracts by Sephadex LH-20 and TLC analysis

0.5 g of each plant extract was subjected to Sephadex LH-20 column chromatography (1.0 cm i.d. × 90 cm) and eluted with CH₂Cl₂-CH₃OH (1:1). The eluents were collected with a unit of 5 mL. Due to different chromatographic characteristics, the pigment was separated from the chemical ingredients by Sephadex LH-20 gel column chromatography. Guided by TLC analysis, the eluents containing chemical ingredients were combined and evaporated to dryness. 50 μg of these purified extracts were subjected to TLC analysis and developed with petroleum ether-acetone (3:1). TLC plates were visualized at 254 nm, 365 nm, and 10% H₂SO₄-EtOH followed by heating.