SUPPLEMENTARY MATERIAL

Mangostanaxanthone VIII, a new xanthone from *Garcinia mangostana* and its cytotoxic activity

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Abstract

A new prenylated xanthone, mangostanaxanthone VIII (7) and six known metabolites: gartanin (1), 1,3,8-trihydroxy-2-(3-methyl-2-butanyl)-4-(3-hydroxy-3-methylbutanoyl)-xanthone (2), rubraxanthone (3), 1,3,6,7-tetrahydroxy-8-prenylxanthone (4), garcinone C (5), and xanthone I (9-hydroxycalabaxanthone) (6) were separated from the EtOAc-soluble fraction of the air-dried pericarps of *Garcinia mangostana* (Clusiaceae). Their structures have been verified on the basis of spectroscopic data analysis as well as comparison with the literature. The cytotoxic activity of 7 was assessed against MCF7, A549, and HCT116 cell lines using sulforhodamine B (SRB) assay. Compound 7 showed significant cytotoxic potential against MCF7 and A549 cell lines with IC$_{50}$s 3.01 and 1.96 µM, respectively compared to doxorubicin (0.06 and 0.44 µM, respectively). However, it exhibited moderate activity towards HCT116 cell line.

**Keywords:** Clusiaceae; *Garcinia mangostana*; Mangostanaxanthone VIII; xanthones; cytotoxic activity
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Figure S5. Key HMBC correlations of compound 7