Cytotoxic β-Dihydroagarofuran Sesquiterpenoids from the Fruits of *Celastrus orbiculatus*

Jing Xu\textsuperscript{a}, Yuan-Qiang Guo\textsuperscript{a,*,} Xian Li\textsuperscript{b, *}, Kun Wei\textsuperscript{c}, Xiaojun Zhao\textsuperscript{d}, and Shuzhong Zhang\textsuperscript{e}

\textsuperscript{a} Department of Pharmaceutical Sciences, Nankai University, Tianjin 300071, P.R. China. E-mail: victgyq@163.com
\textsuperscript{b} Research Department of Natural Medicine, Shenyang Pharmaceutical University, Shenyang 110016, P.R. China
\textsuperscript{c} School of Chemical Science and Technology, Yunnan University, Yunnan 650091, P.R. China
\textsuperscript{d} College of Chemistry & Life Sciences, Tianjin Normal University, Tianjin 300387, P.R. China
\textsuperscript{e} State Key Laboratory of Elemento-organic Chemistry, Nankai University, Tianjin 300071, P.R. China

* Authors for correspondence and reprint requests


Assay-guided fractionation led to the isolation of nine β-dihydroagarofuran sesquiterpenoids from the fruits of *Celastrus orbiculatus*. All isolated β-dihydroagarofuran sesquiterpenoids were tested for their cytotoxic activity against human melanoma A375-S2 and human cervical carcinoma Hela cell lines. Among them, compounds \textit{1–5} and \textit{7} showed cytotoxic activity. Compound \textit{3} exhibited promising cytotoxicity against both human melanoma A375-S2 and human cervical carcinoma Hela cell lines. The structure-activity relationship was discussed briefly.

\textbf{Key words:} *Celastrus orbiculatus*, Sesquiterpenoids, Cytotoxic Activity