Supporting Information

The Absolute Configurations of Hyperilongenols A–C: Rare 12,13-Seco-Spiro cyclic Polycyclic Poly prenylated Acylphloroglucinols with Enolizable β,β’-Tricarbonyl Systems from Hypericum longistylum Oliv.

Na Zhang,a Zhengyi Shi,a Yi Guo,a Shuangshuang Xie,a Yuben Qiao,a Xiao-Nian Li,b Yongbo Xue,*a Zengwei Luo,a Hucheng Zhu,a Chunmei Chen,a Linzhen Hu,a,c Yonghui Zhang*a

aHubei Key Laboratory of Natural Medicinal Chemistry and Resource Evaluation, School of Pharmacy, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430030, Hubei Province, People’s Republic of China.
bState Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650204, Yunnan Province, People’s Republic of China.
cNational & Local Joint Engineering Research Center of High-throughput Drug Screening Technology, Hubei Key Laboratory of Biotechnology of Chinese Traditional Medicine, School of Life Sciences, Hubei University Wuhan 430062, Hubei Province, People’s Republic of China.

E-mails:
zhangyh@mails.tjmu.edu.cn (Y.Z.); yongboxue@mail.hust.edu.cn (Y.X.)
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![NMR Spectrum]

**Table S1** PPAPs with enolizable $\beta,\beta'$-triC or $\beta$-diC systems

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<td>12‒14</td>
<td>semsinones A‒C$^4$</td>
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<td>oblongifolin L, N‒Q, T‒U$^5$</td>
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<td>35‒36</td>
<td>guttiferone K‒L$^{12}$</td>
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<td>37‒38</td>
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40–44  guttiferone A–E\textsuperscript{15}
45–47  guttiferone M
48–51  7-epi-garcinol
52  guttiferone Q\textsuperscript{18}
53  cowanone\textsuperscript{19}
54  garcimultiflorone K\textsuperscript{20}
55–59  Garcimultiflorone D–F
60–63  garciesculentone B–E\textsuperscript{22}
64  xanthochymol\textsuperscript{23}
65  laxifloranone\textsuperscript{24}
66–67  guttiferone H
68–69  guttiferone M–N\textsuperscript{26}
70  guttiferone F\textsuperscript{27}
71  camboginol\textsuperscript{28}
72  garcimultiflorone H\textsuperscript{29}
73  trijapin D\textsuperscript{30}
74  garcinielliptone HF\textsuperscript{31}

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<td>garcinielliptone F\textsuperscript{38}</td>
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The PPAPs with enolizable $\beta$–dicarbonyl ($\beta$–diC) systems


(15) Gustafson, K. R.; Blunt, J. W.; Munro, M. H.; Fuller, R. W.; McKee, T. C.; Cardellina II, J. H.; McMahon, J. B.; Cragg, G. M.; Boyd, M. R. The guttiferones, HIV-inhibitory benzophenones from Symphonia globulifera,


(33) Lokvam, J.; Braddock, J. F.; Reichardt, P. B.; Clausen, T. P. Two polyprenylated benzophenones from


\begin{table}[h]
\centering
\caption{Antibacterial activities of compounds 1–3 with MIC\textsubscript{50} Values ± SD (μM)}
\begin{tabular}{|c|c|c|c|}
\hline
 & \textit{Escherichia coli} & \textit{Pseudomonas aeruginosa} & \textit{Staphylococcus aureus} & \textit{Salmonella enterica} \\
 & ATCC25922 & ATCC27853 & subsp. Aureus & subsp. enterica \\
\hline
1 & & & & \\
\hline
2 & & & & \\
\hline
3 & & & & \\
\hline
Penicillin\textsuperscript{a} & & & & \\
\hline
\end{tabular}
\end{table}

\textsuperscript{a}Penicillin was used as positive control.

\textsuperscript{b}not detected (practical limit of detection).
Figure S25. $^1$H NMR (400 MHz) spectrum of compound 1 (Recorded in C$_5$D$_5$N, 298 K).

Figure S26. $^{13}$C NMR (100 MHz) spectrum of compound 1 (Recorded in C$_5$D$_5$N, 298 K)
**Figure S27.** HSQC spectrum of compound 1 (Recorded in C\textsubscript{5}D\textsubscript{5}N, 298 K)

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Figure S30. NOESY spectrum of compound 1 (Recorded in C$_5$D$_5$N, 298 K)
Figure S31. HRESIMS of compound 1.
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Figure S33. IR spectrum of compound 1
Figure S34. $^1$H NMR (400 MHz) spectrum of compound 2 (Recorded in C$_5$D$_5$N, 298 K)

Figure S35. $^{13}$C NMR (100 MHz) spectrum of compound 2 (Recorded in C$_5$D$_5$N, 298 K)
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**Figure S38.** HMBC spectrum of compound 2 (Recorded in C$_5$D$_5$N, 298 K)

**Figure S39.** NOESY spectrum of compound 2 (Recorded in C$_5$D$_5$N, 298 K)
Figure S40. HRESIMS of compound 2.
**Figure S41.** UV spectrum of compound 2

**Figure S42.** IR spectrum of compound 2
Figure S43. $^1$H NMR (400 MHz) spectrum of compound 3 (Recorded in C$_5$D$_5$N, 298 K)

![H NMR spectrum of compound 3](image)

Figure S44. $^{13}$C NMR (100 MHz) spectrum of compound 3 (Recorded in C$_5$D$_5$N, 298 K)

![C NMR spectrum of compound 3](image)
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Figure S49. HRESIMS of compound 3.
Figure S50. UV spectrum of compound 3

Figure S51. IR spectrum of compound 3
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Figure S53. $^{13}$C NMR (200 MHz) spectrum of compound 4 (Recorded in CDCl$_3$, 298 K)
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Figure S55. HMBC spectrum of compound 4 (Recorded in CDCl$_3$, 298 K)
Figure S56. NOESY spectrum of compound 4 (Recorded in CDCl₃, 298 K)
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![H NMR spectrum of compound 5](image)

Figure S59. $^{13}$C NMR (200 MHz) spectrum of compound 5 (Recorded in CDCl$_3$, 298 K)

![C NMR spectrum of compound 5](image)
Figure S60. HSQC spectrum of compound 5 (Recorded in CDCl$_3$, 298 K)

Figure S61. HMBC spectrum of compound 5 (Recorded in CDCl$_3$, 298 K)
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Figure S73. HMBC spectrum of compound 7 (Recorded in CDCl₃, 298 K)
Figure S74. NOESY spectrum of compound 7 (Recorded in CDCl₃, 298 K)
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Figure S88. NOESY spectrum of compound 9 (Recorded in CDCl₃, 298 K)
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![Experimental ECD spectra of 1, 4–7](image1)

**Figure S118.** Experimental ECD spectra of 2, 8–11.

![Experimental ECD spectra of 2, 8–11](image2)

**Figure S119.** Experimental ECD spectra of 3, 12–13.

![Experimental ECD spectra of 3, 12–13](image3)