Supporting Information for

A Stereoselective Total Synthesis of 7,8-O-isopropylidene Iriomoteolide-3a

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General information

Spectra of the corresponding compounds

S1 H NMR for 15, S3 H NMR & 13 C NMR for 16, S5 H NMR & 13 C NMR for 17, S6 H NMR & 13 C NMR for 7, S7 H NMR & 13 C NMR for 18, S8 H NMR & 13 C NMR for 19, S9 H NMR & 13 C NMR for 20, S10 H NMR & 13 C NMR for 21, S11 H NMR & 13 C NMR for 2, S12 H NMR for 12, S13 H NMR & 13 C NMR for 24, S14 H NMR & 13 C NMR for 26, S15 H NMR & 13 C NMR for 8, S16 H NMR & 13 C NMR for 27, S17 H NMR & 13 C NMR for 28, S18 H NMR & 13 C NMR for 29, S19 H NMR & 13 C NMR for 30, S20 H NMR & 13 C NMR for 31, S21 H NMR & 13 C NMR for 3, S22 H NMR & 13 C NMR for 4, S23 H NMR & 13 C NMR for 33, S24 H NMR & 13 C NMR for 34, S25 H NMR & 13 C NMR for 34, S26 H NMR & 13 C NMR for 7,8-O-isopropylidene Iriomoteolide-3a (1 ), S27 HPLC spectrum for 23.
**General information:** All solvents were distilled prior to use except where noted. All reactions sensitive to moisture or oxygen were conducted under an atmosphere of nitrogen or argon using flame-dried or oven-dried (300 ℃) glassware. Crushed 4Å molecular sieves were activated by flame-drying immediately prior to use. Tetrahydrofuran (THF), diethyl ether (Et₂O) and toluene (PhCH₃) were purified by sodium/benzophenone. Dichloromethane (CH₂Cl₂), N, N-diisopropylethylamine (DIPEA), diisopropylamine, pyridine, triethylamine (TEA) and boron trifluoride etherate were distilled from calcium hydride before use. Dimethylsulfoxide (DMSO) and dimethylformamide (DMF) were distilled from calcium hydride under reduced pressure and stored over 4Å molecular sieves until needed. Reactions were monitored by thin-layer chromatography (TLC) carried out on 0.25 mm silica gel plates visualized with UV light and/or by staining with ethanolic phosphomolybdic acid (PMA). Flash column chromatography was performed on silica gel H (10-40 μ). NMR spectra were recorded on 300 or 500 MHz instruments. Chemical shifts (δ) are given in ppm relative to TMS, coupling constants (J) in Hz. IR spectra were recorded on a spectrometer. Optical rotations were taken. Mass spectra (MS) were measured with a spectrometer. High resolution mass spectra (HRMS) were recorded on a mass spectrometer. Elemental analyses were performed. Melting point were measured on a digital melting-point apparatus.
HO~\overset{\text{OTBDPS}}{\text{16}}

Chemical Formula: C_{14}H_{26}O_{5}Si
Exact Mass: 396.2172
Molecular Weight: 396.0738
THPO

Chemical Formula: C₇H₁₀O₃
Exact Mass: 200.14
Molecular Weight: 202.27
Supplementary Material (ESI) for Organic & Biomolecular Chemistry
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[Chemical structure images and spectra]

THPO

OPMB

Molecular Weight: 330.42

[Additional spectra and data]

[Author information]

14
Supplementary Material (ESI) for Organic & Biomolecular Chemistry
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Chemical Formula: C_{36}H_{47}O_{10}S
Exact Mass: 536.3326
Molecular Weight: 536.7886

Chemical Formula: C_{36}H_{47}O_{10}S
Exact Mass: 536.3326
Molecular Weight: 536.7886
7,8-O-isopropylidene Iriomoteolide-3α (1)
HPLC spectrum for 23

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[Diagram]

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[Diagram]