



**(6R)-2,6-Heptanediol (6).**<sup>8</sup> To a stirred solution of **5** (1.02 g, 7.0 mmol) in dry THF (50 mL) was added dropwise a solution of methylmagnesium bromide (3.0 M solution in diethyl ether, 10 mL, 30.0 mmol) over 10 min at 0 °C under the nitrogen atmosphere. After 1 h, the reaction mixture was allowed to warm to room temperature and the stirring was continued for an additional 30 min. The reaction mixture was poured into cold saturated NH<sub>4</sub>Cl solution and extracted with EtOAc (100 mL×3). The combined organic layer was washed with brine, dried over MgSO<sub>4</sub>, filtered, and then concentrated *in vacuo* to afford a pale yellow oil, which was purified by flash column chromatography (SiO<sub>2</sub>, CH<sub>2</sub>Cl<sub>2</sub>/MeOH; 10/1 (v/v)) to give **6** as a colorless oil. [α]<sub>D</sub><sup>25</sup> 8.2° (c 1.0 in THF); <sup>1</sup>H NMR (300 MHz) δ 3.82 (m, 1 H), 2.35 (br s, OH, 2 H), 1.35-1.60 (m, 6 H), 1.22 (s, 6 H) 1.19 (d, *J* = 6.2 Hz, 3 H); <sup>13</sup>C NMR (75.4 MHz) δ 70.9, 67.6, 43.4, 39.5, 29.3, 29.0, 23.5, 20.3.

**(R)-(-)-Sulcatol, (2R)-(-)-6-methyl-5-hepten-2-ol (7).**<sup>2</sup> A stirred solution of **6** (0.88 g, 6.0 mmol) and catalytic amount of *p*-TsOH in benzene (30 mL) was refluxed for 1 h. After cooling the reaction mixture to room temperature, the reaction mixture was poured into cold saturated NaHCO<sub>3</sub> solution. The organic layer was separated and the aqueous layer was extracted with ether (50 mL×2). The combined organic layer was washed with saturated NaHCO<sub>3</sub> solution, dried over MgSO<sub>4</sub>, filtered, and then concentrated *in vacuo* to afford a pale yellow oil, which was purified by flash column

chromatography (SiO<sub>2</sub>, *n*-hexane/ether; 1/1 (v/v)) to give a inseparable mixture of **7** and (2*R*)-6-methyl-6-hepten-2-ol **8** (0.74 g, 95%, **7/8** = 13/1) as a colorless oil. <sup>1</sup>H NMR (300 MHz) δ 5.15 (m, 1 H, H-5 from **7**), 4.70 (m, 2 H, H-7 from **8**), 3.80 (m, 2 H, H-2 from **7** and H-2 from **8**), 1.90-2.20 (m, 4 H, H-4 from **7** and H-4 from **8**), 1.1-1.85 (other peaks).

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