

# Supporting Information

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## SI Synthesis and Characterization

The synthetic route for binaphthol derivatives ( $n = 1, 2$  and  $3$ ) is shown in Scheme S1.

**Synthesis of L1.** To a degassed solution of 6,6'-dibromo-1,1'-bi-2-naphthol (300 mg, 0.68 mmol), potassium carbonate (560 mg, 4.08 mmol), and dry dimethylformamide (50 mL) was added a solution of 1-bromobutane (0.3 mL, 2.7 mmol). The reaction mixture was heated to reflux for 24 h. The resulting mixture was evaporated to dryness, and the residue was purified by column chromatography (70–230 mesh) using a hexane-dichloromethane mixture [10:1 (vol/vol)] as eluent to give **L1** as a pale yellow solid. The yield was as follows: 355 mg (95%).  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , 300 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 8.00$  (s, 2H, naphthalene), 7.83 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.40 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.25 (dd,  $^3J = 8.8$  Hz,  $^4J = 1.6$  Hz, 2H, naphthalene), 6.96 (d,  $^3J = 8.8$  Hz, 2H, naphthalene), 3.94 (m, 4H,  $^{''}\text{Bu}$ ), 1.37 (m, 4H,  $^{''}\text{Bu}$ ), 1.00 (m, 4H,  $^{''}\text{Bu}$ ), 0.65 (t,  $^3J = 7.4$  Hz, 6H,  $^{''}\text{Bu}$ );  $^{13}\text{C} \{^1\text{H}\}$  NMR (125.8 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 155.4, 129.7, 129.4, 128.7, 128.6, 128.4, 128.3, 123.9, 120.1, 117.6, 116.0$  (C on naphthalene and phenyl rings), 91.5, 90.9, 89.2, 89.1, 88.2 ( $\text{C}\equiv\text{C}$ ), 37.1 (tertiary C on  $-\text{Si}'\text{Pr}_3$  groups), 69.4, 31.3, 18.7, 13.6 (C on  $^{''}\text{Bu}$  groups), 11.3 (primary C on  $-\text{Si}'\text{Pr}_3$  groups); IR (nujol): 2,123  $\text{cm}^{-1}$   $\nu(\text{C}\equiv\text{C})$ ; HRMS (positive EI)  $m/z$  found (calculated for  $\text{C}_{82}\text{H}_{86}\text{O}_2\text{Si}_2$ ): 1,158.6113 (1,158.6166).

**Synthesis of L2.** To a 100-mL two-necked round-bottomed flask fitted with a magnetic stirrer were added **L1** (320 mg, 0.58 mmol), bis(triphenylphosphine)-palladium(II) dichloride (20 mg, 0.03 mmol), tetrakis(triphenylphosphine)-palladium(0) (33 mg, 0.03 mmol), and copper(I) iodide (5 mg, 0.03 mmol). Dry tetrahydrofuran (50 mL) and triethylamine (20 mL) were then transferred to the mixture. 1-Ethynyl-3-triisopropylsilylethynylbenzene (461 mg, 1.7 mmol) was added dropwise with a syringe. The reaction mixture was heated to reflux for 48 h. The resulting mixture was evaporated to dryness, and the residue was purified by column chromatography (70–230 mesh) using a hexane-dichloromethane mixture [10:1 (vol/vol)] as eluent to give **L2** as a pale yellow oil. The yield was as follows: 248 mg (45%).  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , 300 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 8.08$  (s, 2H, naphthalene), 7.91 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.66 (t, 2H,  $^4J = 1.3$  Hz, 2H, phenyl), 7.46 (dt,  $^3J = 7.9$  Hz,  $^4J = 1.3$  Hz, 2H, phenyl), 7.43 (m, 4H, phenyl and naphthalene), 7.30 (dd,  $^3J = 8.8$  Hz,  $^4J = 1.6$  Hz, 2H, naphthalene), 7.29 (t,  $^3J = 7.9$  Hz, 2H, phenyl), 7.10 (d,  $^3J = 8.8$  Hz, 2H, naphthalene), 3.94 (m, 4H,  $^{''}\text{Bu}$ ), 1.37 (m, 4H,  $^{''}\text{Bu}$ ), 1.26 (m, 6H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 1.00 (m, 4H,  $^{''}\text{Bu}$ ), 1.14 (d, 36H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 0.65 (t,  $^3J = 7.4$  Hz, 6H,  $^{''}\text{Bu}$ );  $^{13}\text{C} \{^1\text{H}\}$  NMR (125.8 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 129.7, 129.4, 128.7, 128.6, 128.4, 128.3, 123.9, 120.1, 117.6, 116.0$  (C on naphthalene and phenyl rings), 91.5, 90.9, 89.3, 89.2, 89.0, 88.9, 88.2 ( $\text{C}\equiv\text{C}$ ), 37.1 (tertiary C on  $-\text{Si}'\text{Pr}_3$  groups), 69.4, 31.3, 18.7, 13.6 (C on  $^{''}\text{Bu}$  groups), 11.3 (primary C on  $-\text{Si}'\text{Pr}_3$  groups); IR (nujol): 2,120  $\text{cm}^{-1}$   $\nu(\text{C}\equiv\text{C})$ ; HRMS (positive EI)  $m/z$  found (calculated for  $\text{C}_{66}\text{H}_{78}\text{O}_2\text{Si}_2$ ): 958.5573 (958.5540).

**Synthesis of L3.** The titled compound was prepared according to the procedure similar to that described for the preparation of **L2**, except *meta*-PE H-( $\text{C}\equiv\text{C}-1,3-\text{C}_6\text{H}_4)_2-\text{C}\equiv\text{C}-\text{Si}'\text{Pr}_3$  (632 mg, 1.70 mmol) was used in place of 1-ethynyl-3-triisopropylsilylethynylbenzene to give **L3** as a pale yellow oil. The yield was as follows: 389 mg (56%).  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 8.09$  (s, 2H, naphthalene), 7.92 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.73 (t,  $^4J = 1.3$  Hz, 2H, phenyl), 7.66 (t,  $^4J = 1.3$  Hz, 2H, phenyl), 7.50 (dt,  $^3J = 7.9$  Hz,  $^4J = 1.3$  Hz, 2H, phenyl), 7.45 (m, 8H, phenyl and naphthalene), 7.33 (t,  $^3J = 7.9$  Hz, 2H, phenyl),

7.31 (dd,  $^3J = 8.8$  Hz,  $^4J = 1.6$  Hz, 2H, naphthalene), 7.27 (t,  $^3J = 7.9$  Hz, 2H, phenyl), 7.11 (d,  $^3J = 8.8$  Hz, 2H, naphthalene), 3.94 (m, 4H,  $^{''}\text{Bu}$ ), 1.37 (m, 4H,  $^{''}\text{Bu}$ ), 1.26 (m, 6H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 1.00 (m, 4H,  $^{''}\text{Bu}$ ), 1.14 (d, 36H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 0.65 (t,  $^3J = 7.4$  Hz, 6H,  $^{''}\text{Bu}$ );  $^{13}\text{C} \{^1\text{H}\}$  NMR (125.8 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 155.4, 135.1, 134.6, 133.7, 131.9, 131.7, 131.4, 131.3, 131.1, 129.3, 128.7, 128.6, 128.5, 128.3, 125.5, 124.0, 123.9, 123.3, 123.2, 120.1, 117.6, 116.0$  (C on naphthalene and phenyl rings), 91.5, 90.9, 89.2, 89.1, 88.2 ( $\text{C}\equiv\text{C}$ ), 37.1 (tertiary C on  $-\text{Si}'\text{Pr}_3$  groups), 69.4, 31.3, 18.7, 13.6 (C on  $^{''}\text{Bu}$  groups), 11.3 (primary C on  $-\text{Si}'\text{Pr}_3$  groups); IR (nujol): 2,123  $\text{cm}^{-1}$   $\nu(\text{C}\equiv\text{C})$ ; HRMS (positive EI)  $m/z$  found (calculated for  $\text{C}_{82}\text{H}_{86}\text{O}_2\text{Si}_2$ ): 1,158.6113 (1,158.6166).

**Synthesis of L4.** The titled compound was prepared according to the procedure similar to that described for the preparation of **L2**, except *meta*-PE H-( $\text{C}\equiv\text{C}-1,3-\text{C}_6\text{H}_4)_3-\text{C}\equiv\text{C}-\text{Si}'\text{Pr}_3$  (801 mg, 1.7 mmol) was used in place of 1-ethynyl-3-triisopropylsilylethynylbenzene to give **L4** as a pale yellow oil. The yield was as follows: 490 mg (60%).  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 8.09$  (s, 2H, naphthalene), 7.93 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.74 (t, 2H,  $^4J = 1.3$  Hz, 2H, phenyl), 7.72 (t,  $^4J = 1.3$  Hz, 2H, phenyl), 7.66 (t,  $^4J = 1.3$  Hz, 2H, phenyl), 7.51 (dt,  $^3J = 7.9$  Hz,  $^4J = 1.3$  Hz, 2H, phenyl), 7.45 (m, 12H, phenyl and naphthalene), 7.35 (t,  $^3J = 7.9$  Hz, 4H, phenyl), 7.32 (dd,  $^3J = 8.8$  Hz,  $^4J = 1.6$  Hz, 2H, naphthalene), 7.30 (t,  $^3J = 7.9$  Hz, 2H, phenyl), 7.12 (d,  $^3J = 8.8$  Hz, 2H, naphthalene), 3.94 (m, 4H,  $^{''}\text{Bu}$ ), 1.37 (m, 4H,  $^{''}\text{Bu}$ ), 1.26 (m, 6H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 1.00 (m, 4H,  $^{''}\text{Bu}$ ), 1.14 (d, 36H,  $-\text{Si}\{\text{CH}(\text{CH}_3)_2\}_3$ ), 0.65 (t,  $^3J = 7.4$  Hz, 6H,  $^{''}\text{Bu}$ );  $^{13}\text{C} \{^1\text{H}\}$  NMR (125.8 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 155.4, 135.1, 134.7, 134.6, 133.7, 131.9, 131.7, 131.5, 131.4, 131.3, 131.1, 129.3, 128.7, 128.6, 128.5, 128.3, 125.5, 124.0, 123.9, 123.5, 123.4, 123.3, 123.2, 120.1, 117.6, 116.0$  (C on naphthalene and phenyl rings), 91.5, 90.9, 89.3, 89.2, 89.0, 88.9, 88.2 ( $\text{C}\equiv\text{C}$ ), 37.1 (tertiary C on  $-\text{Si}'\text{Pr}_3$  groups), 69.4, 31.3, 18.7, 13.6 (C on  $^{''}\text{Bu}$  groups), 11.3 (primary C on  $-\text{Si}'\text{Pr}_3$  groups); IR (nujol): 2,120  $\text{cm}^{-1}$   $\nu(\text{C}\equiv\text{C})$ ; HRMS (positive EI)  $m/z$  found (calculated for  $\text{C}_{95}\text{H}_{94}\text{O}_2\text{Si}_2$ ): 1,358.6334 (1,358.6792).

**Synthesis of L5.** To a solution of **L2** (240 mg, 0.30 mmol) and tetrahydrofuran (200 mL) was added a solution of tetra-*n*-butylammonium fluoride (0.1 M) in tetrahydrofuran (1 mL). The solution was stirred for 15 min, and the solvent was removed. After that, the residue was purified by column chromatography (70–230 mesh) using a hexane-dichloromethane mixture [10:1 (vol/vol)] as eluent to give **L5** as a pale yellow oil. The yield was as follows: 153 mg (95%).  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ , 300 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 8.08$  (s, 2H, naphthalene), 7.91 (d,  $^3J = 9.1$  Hz, 2H, naphthalene), 7.66 (t,  $^4J = 1.3$  Hz, 2H, phenyl), 7.46 (dt,  $^3J = 7.9$  Hz,  $^4J = 1.3$  Hz, 2H, phenyl), 7.43 (m, 4H, phenyl and naphthalene), 7.30 (dd,  $^3J = 8.8$  Hz,  $^4J = 1.6$  Hz, 2H, naphthalene), 7.29 (t,  $^3J = 7.9$  Hz, 2H, phenyl), 7.10 (d,  $^3J = 8.8$  Hz, 2H, naphthalene), 3.94 (m, 4H,  $^{''}\text{Bu}$ ), 3.10 (s, 2H,  $-\text{C}\equiv\text{CH}$ ), 1.37 (m, 4H,  $^{''}\text{Bu}$ ), 1.00 (m, 4H,  $^{''}\text{Bu}$ ), 0.65 (t,  $^3J = 7.4$  Hz, 6H,  $^{''}\text{Bu}$ );  $^{13}\text{C} \{^1\text{H}\}$  NMR (125.8 MHz,  $\text{CDCl}_3$ , 298 K, relative to  $\text{Me}_4\text{Si}$ ):  $\delta = 155.4, 135.1, 133.7, 131.8, 131.6, 129.3, 128.7, 128.6, 128.4, 125.5, 124.0, 122.6, 120.1, 117.6, 116.0$  (C on naphthalene and phenyl rings), 90.9, 88.0, 82.9 ( $\text{C}\equiv\text{C}$ ), 69.4, 31.6, 18.7, 13.5 (C on  $^{''}\text{Bu}$  group); IR (nujol): 2,122  $\text{cm}^{-1}$   $\nu(\text{C}\equiv\text{C})$ ; HRMS (positive EI)  $m/z$  found (calculated for  $\text{C}_{48}\text{H}_{38}\text{O}_2$ ): 646.2898 (646.2872).

**Synthesis of L6.** The titled compound was prepared according to the procedure similar to that described for the preparation of **L5**, except **L4** (348 mg, 0.30 mmol) was used in place of **L2** to give **L6** as a pale yellow oil. The yield was as follows: 251 mg (99%). <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 8.09 (s, 2H, naphthalene), 7.93 (d, <sup>3</sup>J = 9.1 Hz, 2H, naphthalene), 7.73 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.66 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.45 (m, 10H, phenyl and naphthalene), 7.34 (t, <sup>3</sup>J = 7.9 Hz, 2H, phenyl), 7.32 (dd, <sup>3</sup>J = 8.8 Hz, <sup>4</sup>J = 1.6 Hz, 2H, naphthalene), 7.28 (t, <sup>3</sup>J = 7.9 Hz, 2H, phenyl), 7.12 (d, <sup>3</sup>J = 8.8 Hz, 2H, naphthalene), 3.96 (m, 4H, <sup>-</sup>Bu), 3.10 (s, 2H, <sup>-</sup>C≡CH), 1.42 (m, 4H, <sup>-</sup>Bu), 1.02 (m, 4H, <sup>-</sup>Bu), 0.66 (t, <sup>3</sup>J = 7.4 Hz, 6H, <sup>-</sup>Bu); <sup>13</sup>C {<sup>1</sup>H} NMR (125.8 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 155.4, 135.2, 134.6, 133.7, 131.9, 131.9, 131.7, 131.5, 131.1, 129.3, 128.7, 128.6, 128.5, 128.4, 125.5, 124.0, 123.5, 123.3, 123.2, 120.1, 117.6, 116.0 (C on naphthalene and phenyl rings), 90.9, 89.3, 88.8, 88.2 82.7 (C≡C), 69.3, 31.3, 18.7, 13.6 (C on <sup>-</sup>Bu groups); IR (nujol): 2,122 cm<sup>-1</sup> ν(C≡C); HRMS (positive EI) *m/z* found (calcd for C<sub>64</sub>H<sub>46</sub>O<sub>2</sub>): 846.3434 (846.3498).

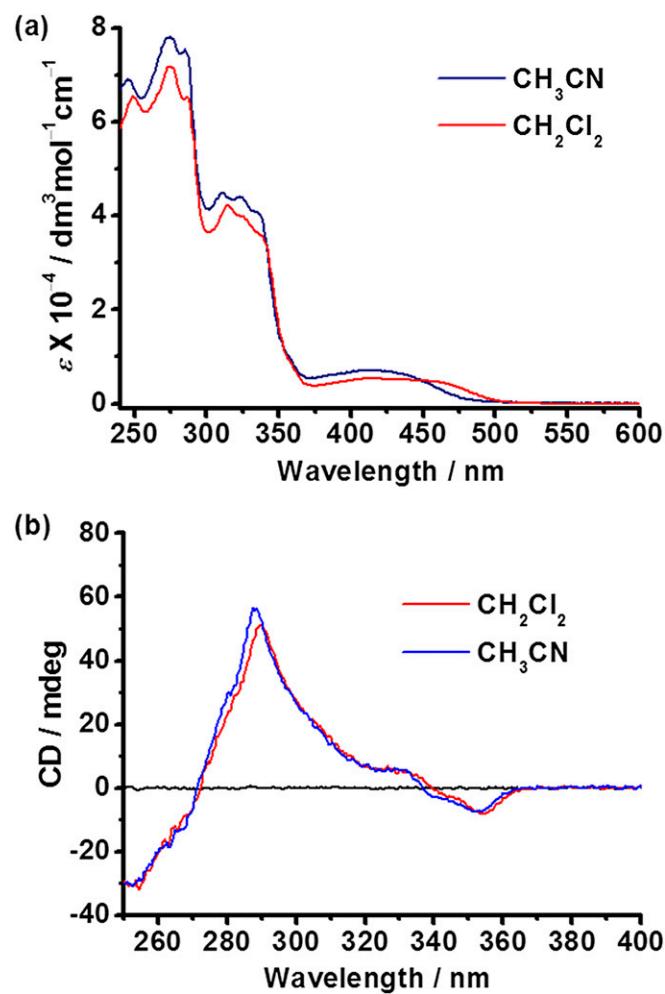
**Synthesis of L7.** The titled compound was prepared according to the procedure similar to that described for the preparation of **L5**, except **L3** (408 mg, 0.3 mmol) was used in place of **L2** to give **L7** as a pale yellow oil. The yield was as follows: 310 mg (99%). <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 8.09 (s, 2H, naphthalene), 7.93 (d, <sup>3</sup>J = 9.1 Hz, 2H, naphthalene), 7.74 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.72 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.66 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.51 (dt, <sup>3</sup>J = 7.9 Hz, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.45 (m, 12H, phenyl and naphthalene), 7.35 (t, <sup>3</sup>J = 7.9 Hz, 4H, phenyl), 7.32 (dd, <sup>3</sup>J = 8.8 Hz, <sup>4</sup>J = 1.6 Hz, 2H, naphthalene), 7.30 (t, <sup>3</sup>J = 7.9 Hz, 2H, phenyl), 7.12 (d, <sup>3</sup>J = 8.8 Hz, 2H, naphthalene), 3.10 (s, 2H, <sup>-</sup>C≡CH), 3.94 (m, 4H, <sup>-</sup>Bu), 1.37 (m, 4H, <sup>-</sup>Bu), 1.00 (m, 4H, <sup>-</sup>Bu), 0.65 (t, <sup>3</sup>J = 7.4 Hz, 6H, <sup>-</sup>Bu); <sup>13</sup>C {<sup>1</sup>H} NMR (125.8 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 155.4, 135.1, 134.7, 134.6, 133.7, 131.9, 131.7, 131.5, 131.4, 131.3, 131.1, 129.3, 128.7, 128.6, 128.5, 128.3, 125.5, 124.0, 123.9, 123.5, 123.4, 123.3, 123.2, 120.1, 117.6, 116.0 (C on naphthalene and phenyl rings), 90.9, 89.3, 89.2, 89.0, 88.9, 88.2, 82.7 (C≡C), 69.4, 31.3, 18.7, 13.6 (C on <sup>-</sup>Bu groups); IR (nujol): 2,120 cm<sup>-1</sup> ν(C≡C); HRMS (positive EI) *m/z* found (calcd for C<sub>80</sub>H<sub>54</sub>O<sub>2</sub>Si<sub>2</sub>): 1,046.4532 (1,046.4124).

**Synthesis of 1.** To a solution of **L5** (30 mg, 0.05 mmol) and [(<sup>-</sup>Bu<sub>3</sub>tpy)PtCl](OTf)<sub>2</sub> (78 mg, 0.10 mmol)] in degassed *N,N*-dimethylformamide (30 mL) containing triethylamine (5 mL) was added a catalytic amount of CuI. The solution was stirred overnight at room temperature. After removing the solvent, the reaction mixture was purified by chromatography on silica gel using a dichloromethane-acetone mixture [10:1 (vol/vol)] as eluent, followed by the diffusion of diethyl ether vapor into an acetonitrile solution to give **1** as a yellow solid. The yield was as follows: 73 mg (68%). <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 9.15 (d with Pt satellites, <sup>3</sup>J = 6.0 Hz, 4H, terpyridyl), 8.45 (s, 4H, terpyridyl), 8.38 (d, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 8.09 (s, 2H, naphthalene), 7.93 (d, <sup>3</sup>J = 9.1 Hz, 2H, naphthalene), 7.70 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.62 (dd, <sup>3</sup>J = 6.0 Hz, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 7.43 (m, 6H, phenyl and naphthalene), 7.31 (m, 4H, phenyl and naphthalene), 7.10 (d, <sup>3</sup>J = 8.8 Hz, 2H, naphthalene), 3.97 (m, 4H, <sup>-</sup>Bu), 1.42 (m, 4H, <sup>-</sup>Bu), 0.88 (m, 4H, <sup>-</sup>Bu), 0.68 (t, <sup>3</sup>J = 7.4 Hz, 6H, <sup>-</sup>Bu); <sup>13</sup>C {<sup>1</sup>H} NMR (125.8 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 168.7, 167.5, 158.8, 155.5 (quaternary C on terpyridyl), 154.0 (tertiary C on terpyridyl), 153.9, 135.0, 134.6, 133.7, 131.9, 131.4, 131.1, 129.7, 129.2, 128.7, 128.6, 128.4, 125.5, 125.4, 124.0, 123.5, 123.1, 123.0, 121.7, 120.0, 117.6, 116.0 (C on naphthalene and phenyl rings), 126.8, 123.5, 123.1 (tertiary C on terpyridyl), 103.6 (Pt-C≡C), 98.6 (Pt-C≡C), 90.9, 89.7, 88.8, 88.2 (C≡C), 38.8, 37.5 (quaternary C on <sup>-</sup>Bu), 30.5, 30.2 (primary C on <sup>-</sup>Bu), 69.2, 36.5, 18.8, 13.6 (C on <sup>-</sup>Bu); IR (nujol): 2122 cm<sup>-1</sup> ν(C≡C); Positive FAB-MS: ion clusters at *m/z* 920.1 [M-2OTf]<sup>2+</sup>; elemental analyses calculated (%) for C<sub>104</sub>H<sub>106</sub>F<sub>6</sub>N<sub>6</sub>O<sub>8</sub>Pt<sub>2</sub>S<sub>2</sub>: C, 58.47; H, 5.00; N, 3.93; found: C, 58.37; H, 5.13; N, 3.79.

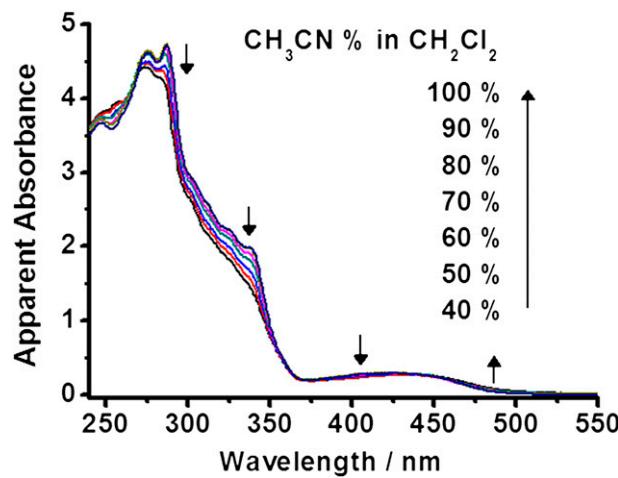
133.7, 131.6, 131.5, 129.7, 129.2, 128.7, 128.6, 128.3, 125.5, 125.4, 121.7, 120.1, 117.8, 116.0 (C on naphthalene and phenyl rings), 126.8, 123.5, 123.1 (tertiary C on terpyridyl), 103.8 (Pt-C≡C), 98.2 (Pt-C≡C), 90.4, 88.8 (C≡C), 38.8, 37.5 (quaternary C on <sup>-</sup>Bu), 30.5, 30.2 (primary C on <sup>-</sup>Bu), 69.2, 36.5, 18.8, 13.6 (C on <sup>-</sup>Bu); IR (nujol): 2121 cm<sup>-1</sup> ν(C≡C); positive Fast atom bombardment (FAB)-MS: ion clusters at *m/z* 920.1 [M-2OTf]<sup>2+</sup>; elemental analyses calculated (%) for C<sub>104</sub>H<sub>106</sub>F<sub>6</sub>N<sub>6</sub>O<sub>8</sub>Pt<sub>2</sub>S<sub>2</sub>: C, 58.47; H, 5.00; N, 3.93; found: C, 58.37; H, 5.13; N, 3.79.

**Synthesis of 2.** The titled complex was prepared according to a procedure similar to that described for the preparation of **1**, except **L6** (42 mg, 0.05 mmol) was used in place of **L5**. The yield was as follows: 85 mg (73%). <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 9.15 (d with Pt satellites, <sup>3</sup>J = 6.0 Hz, 4H, terpyridyl), 8.45 (s, 4H, terpyridyl), 8.38 (d, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 8.09 (s, 2H, naphthalene), 7.93 (d, <sup>3</sup>J = 9.1 Hz, 2H, naphthalene), 7.74 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.68 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.62 (dd, <sup>3</sup>J = 6.0 Hz, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 7.49 (m, 10H, phenyl and naphthalene), 7.31 (m, 6H, phenyl and naphthalene), 7.10 (d, <sup>3</sup>J = 8.8 Hz, 2H, naphthalene), 3.97 (m, 4H, <sup>-</sup>Bu), 1.42 (m, 4H, <sup>-</sup>Bu), 0.88 (m, 4H, <sup>-</sup>Bu), 0.68 (t, <sup>3</sup>J = 7.4 Hz, 6H, <sup>-</sup>Bu); <sup>13</sup>C {<sup>1</sup>H} NMR (125.8 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 168.7, 167.5, 158.8, 155.5 (quaternary C on terpyridyl), 154.0 (tertiary C on terpyridyl), 153.9, 135.0, 134.6, 133.7, 131.9, 131.4, 131.1, 129.7, 129.2, 128.7, 128.6, 128.4, 125.5, 125.4, 124.0, 123.5, 123.1, 123.0, 121.7, 120.0, 117.6, 116.0 (C on naphthalene and phenyl rings), 126.8, 123.5, 123.1 (tertiary C on terpyridyl), 103.6 (Pt-C≡C), 98.6 (Pt-C≡C), 90.9, 89.7, 88.8, 88.2 (C≡C), 38.8, 37.5 (quaternary C on <sup>-</sup>Bu), 30.5, 30.2 (primary C on <sup>-</sup>Bu), 69.2, 36.5, 18.8, 13.6 (C on <sup>-</sup>Bu); IR (nujol): 2123 cm<sup>-1</sup> ν(C≡C); Positive FAB-MS: ion clusters at *m/z* 1020 [M-2OTf]<sup>2+</sup>; elemental analyses calculated (%) for C<sub>120</sub>H<sub>114</sub>F<sub>6</sub>N<sub>6</sub>O<sub>8</sub>Pt<sub>2</sub>S<sub>2</sub>: C, 61.69; H, 4.92; N, 3.60; found: C, 61.97; H, 4.92; N, 3.50.

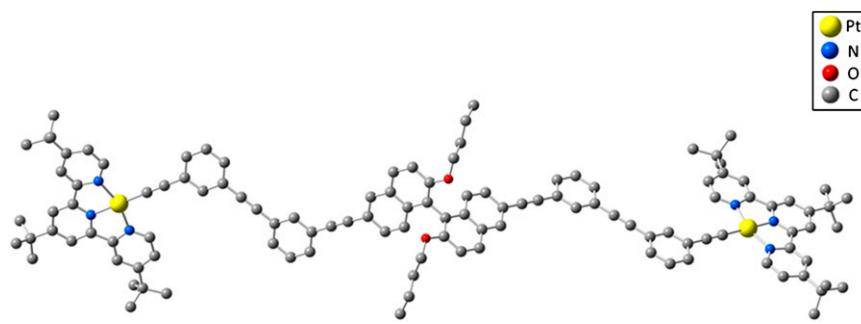
**Synthesis of 3.** The titled complex was prepared according to a procedure similar to that described for the preparation of **1**, except **L7** (89 mg, 0.05 mmol) was used in place of **L5**. The yield was as follows: 80 mg (70%). <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 9.15 (d with Pt satellites, <sup>3</sup>J = 6.0 Hz, 4H, terpyridyl), 8.45 (s, 4H, terpyridyl), 8.38 (d, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 8.09 (s, 2H, naphthalene), 7.93 (d, <sup>3</sup>J = 9.1 Hz, 2H, phenyl), 7.72 (t, <sup>4</sup>J = 1.3 Hz, 2H, phenyl), 7.70 (m, 4H, phenyl), 7.62 (dd, <sup>3</sup>J = 6.0 Hz, <sup>4</sup>J = 1.6 Hz, 4H, terpyridyl), 7.48 (m, 14H, phenyl and naphthalene), 7.40 (m, 8H, phenyl and naphthalene), 7.10 (d, <sup>3</sup>J = 8.8 Hz, 2H, naphthalene), 3.97 (m, 4H, <sup>-</sup>Bu), 1.42 (m, 4H, <sup>-</sup>Bu), 0.88 (m, 4H, <sup>-</sup>Bu), 0.68 (t, <sup>3</sup>J = 7.4 Hz, 6H, <sup>-</sup>Bu); <sup>13</sup>C {<sup>1</sup>H} NMR (125.8 MHz, CDCl<sub>3</sub>, 298 K, relative to Me<sub>4</sub>Si): δ = 168.7, 167.5, 158.8, 155.5 (quaternary C on terpyridyl), 154.0 (tertiary C on terpyridyl), 153.9, 135.0, 134.6, 133.7, 131.9, 131.4, 131.1, 129.7, 129.2, 128.7, 128.6, 128.4, 125.5, 125.4, 124.0, 123.5, 123.1, 123.0, 121.7, 120.0, 117.6, 116.0 (C on naphthalene and phenyl ring), 126.8, 123.5, 123.1 (tertiary C on terpyridyl), 103.6 (Pt-C≡C), 98.6 (Pt-C≡C), 90.9, 89.7, 88.8, 88.2 (C≡C), 38.8, 37.5 (quaternary C on <sup>-</sup>Bu), 30.5, 30.2 (primary C on <sup>-</sup>Bu), 69.2, 36.5, 18.8, 13.6 (C on <sup>-</sup>Bu); IR (nujol): 2122 cm<sup>-1</sup> ν(C≡C); Positive FAB-MS: ion clusters at *m/z* 1120 [M-2OTf]<sup>2+</sup>; elemental analyses calculated (%) for C<sub>136</sub>H<sub>122</sub>F<sub>6</sub>N<sub>6</sub>O<sub>8</sub>Pt<sub>2</sub>S<sub>2</sub>: C, 64.39; H, 4.85; N, 3.31; found: C, 64.57; H, 4.90; N, 3.33.



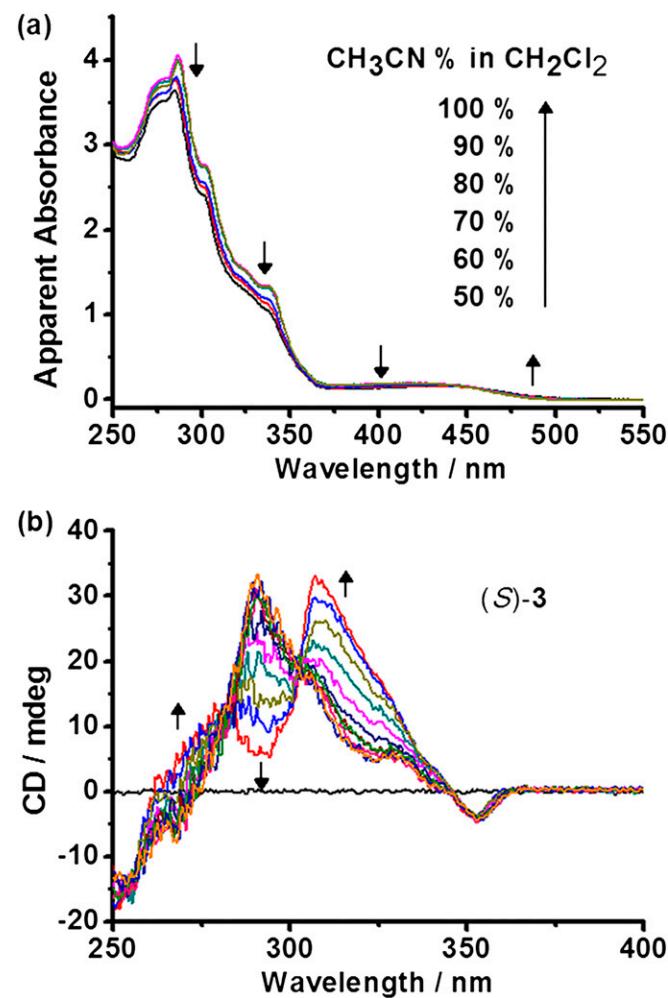
**Fig. S1.** Fig. S1(A) UV-vis absorption spectra of *rac*-1 in  $\text{CH}_2\text{Cl}_2$  (red line) and  $\text{CH}_3\text{CN}$  (blue line) at 298 K. (B) CD spectra of *(S)*-1 in  $\text{CH}_2\text{Cl}_2$  (red line) and  $\text{CH}_3\text{CN}$  (blue line) at 298 K.



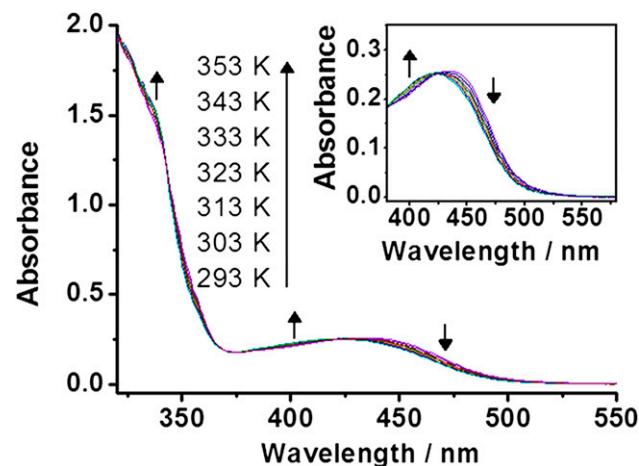
**Fig. S2.** UV-vis absorption spectral traces of *rac*-2 in  $\text{CH}_2\text{Cl}_2$  (2.4  $\times 10^{-5}$  M) with 40%  $\text{CH}_3\text{CN}$  content onward at 298 K.



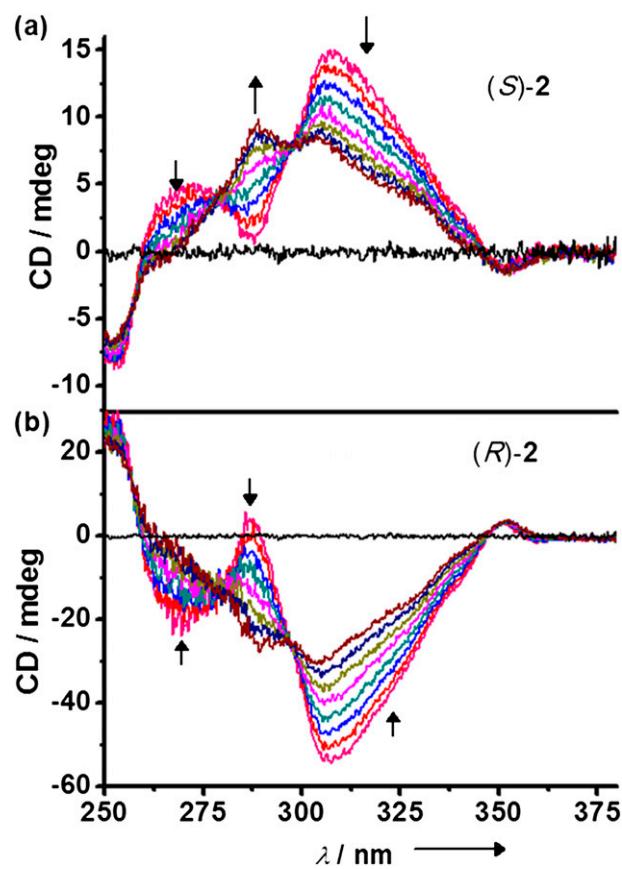
**Fig. S3.** Optimized structure of the all-transoid conformation in (S)-2. The hydrogen atoms are omitted for clarity.



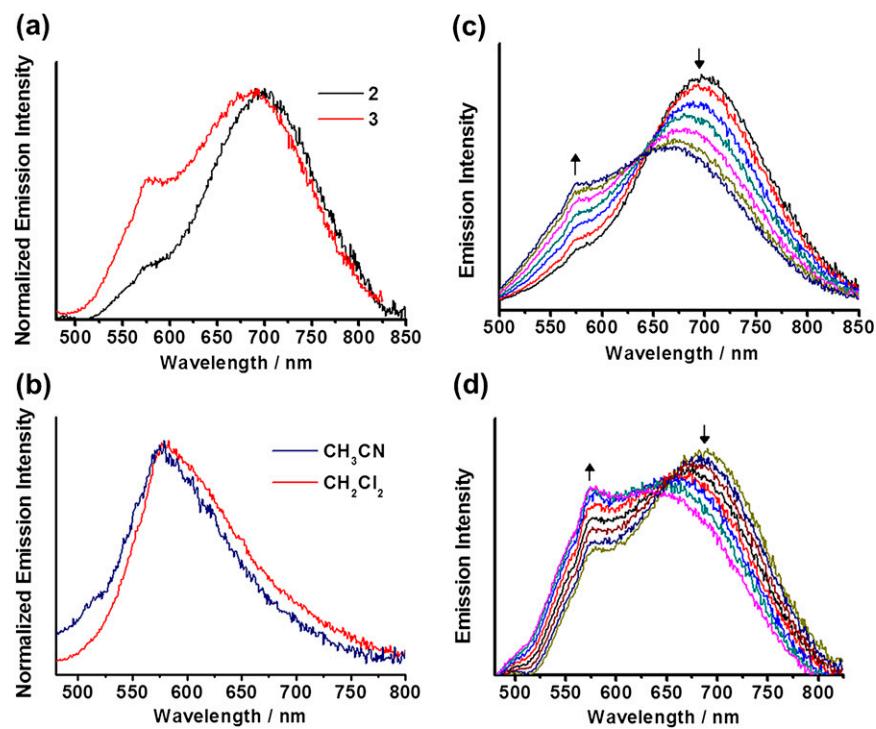
**Fig. S4.** (A) UV-vis absorption spectral traces of *rac*-3 in  $\text{CH}_2\text{Cl}_2$  (2.0  $\times$  10<sup>-5</sup> M) with 50%  $\text{CH}_3\text{CN}$  content onward at 298 K. (B) CD spectral traces of (S)-3 in  $\text{CH}_2\text{Cl}_2$  (1.9  $\times$  10<sup>-5</sup> M) with increasing  $\text{CH}_3\text{CN}$  content at 298 K.



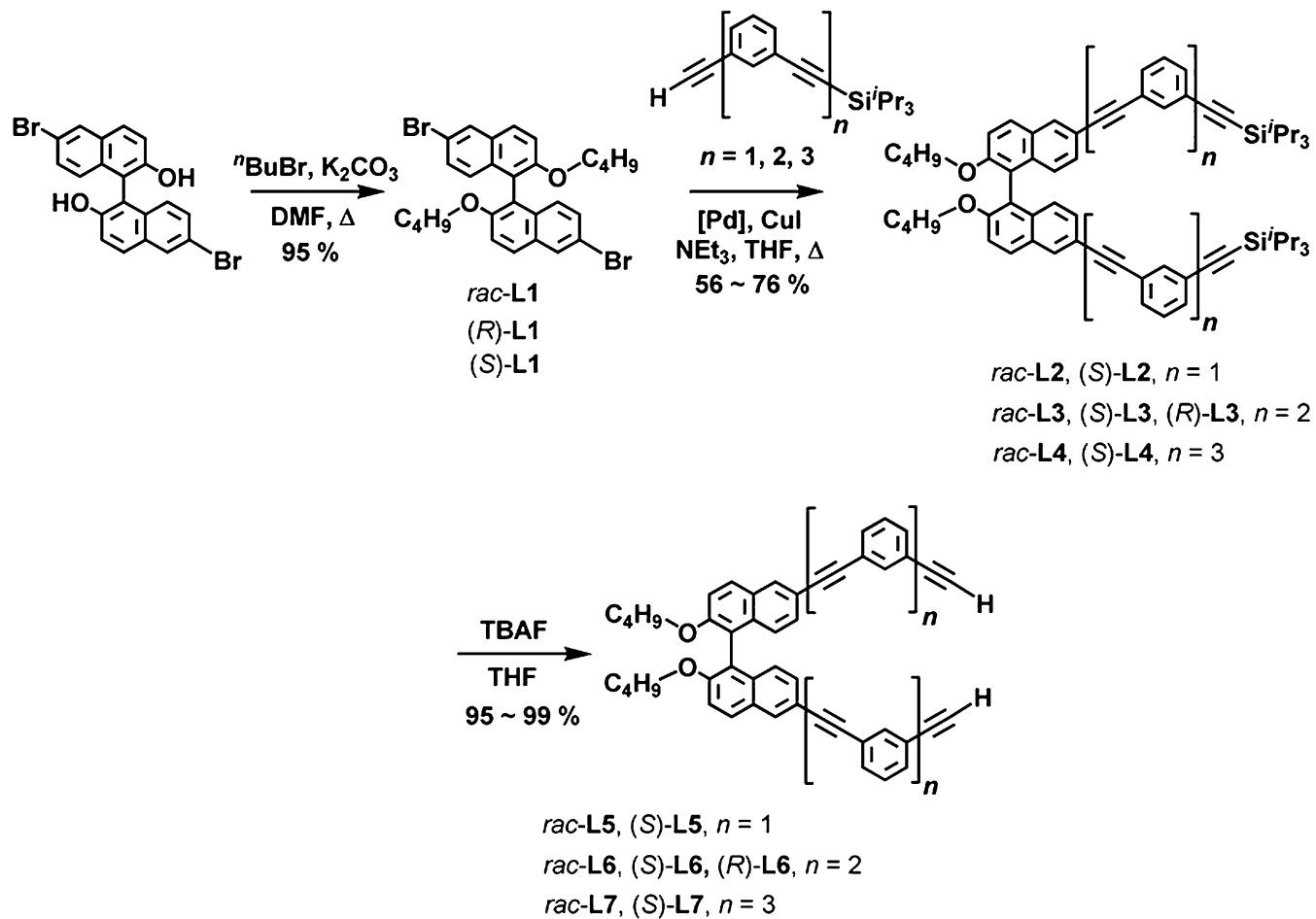
**Fig. S5.** UV-vis spectral traces of *rac*-2 ( $2.4 \times 10^{-5}$  M) in  $\text{CH}_3\text{CN}$  with increasing temperature from 293 to 353 K. (Inset) Expansion of the UV-vis absorption spectra in the 380–550 nm region.



**Fig. S6.** CD spectral traces of (A) (S)-2 ( $1.0 \times 10^{-5}$  M) and (B) (R)-2 ( $1.8 \times 10^{-5}$  M) in  $\text{CH}_2\text{Cl}_2$  with increasing temperature in  $\text{CH}_3\text{CN}$  from 283 to 353 K.



**Fig. S7.** (A) Emission spectra of *rac*-2 (black line) and *rac*-3 (red line) in  $\text{CH}_3\text{CN}$  at 298 K. (B) Emission spectra of *rac*-1 in  $\text{CH}_2\text{Cl}_2$  (red line) and  $\text{CH}_3\text{CN}$  (blue line) at 298 K. (C) Emission spectral traces of *rac*-2 ( $2.0 \times 10^{-5}$  M) with increasing temperature in  $\text{CH}_3\text{CN}$  from 283 to 343 K. (D) Emission spectral traces of *rac*-3 ( $2.4 \times 10^{-5}$  M) with increasing temperature in  $\text{CH}_3\text{CN}$  from 283 to 343 K.



**Scheme S1.** Synthetic route for binaphthol derivatives ( $n = 1, 2$ , and  $3$ ).

Table S1. Cartesian coordinates for selected optimized geometries

No.	Atom	X	Y	Z	No.	Atom	X	Y	Z	No.	Atom	X	Y	Z
Folded structure of (S)-2														
1	C	10.746581	-1.317701	-3.220875	82	H	3.564472	2.297110	6.412483	163	H	-12.634027	1.887156	2.305936
2	C	11.750382	-2.253570	-3.048990	83	C	3.769943	-0.833644	-4.141704	164	H	-11.698131	0.412053	2.063188
3	C	12.818464	-2.017631	-2.154481	84	C	2.927784	-0.304235	-3.442894	165	H	-11.256369	1.537699	3.372475
4	C	12.868927	-0.800432	-1.408538	85	C	3.770971	0.835961	4.141043	166	H	-3.700649	7.844644	-1.348912
5	C	11.866389	0.175573	-1.665043	86	C	2.928985	0.306683	3.441925	167	H	-2.785840	6.326693	-1.230567
6	C	10.839608	-0.072916	-2.532437	87	C	2.000885	0.342155	-2.574404	168	H	-4.418391	6.330997	-1.942032
7	H	13.799495	-3.910428	-2.514466	88	C	2.487089	1.209077	-1.581193	169	H	-3.944450	7.054288	2.305256
8	H	11.706857	-3.206285	-3.577507	89	C	0.623262	0.110776	-2.677992	170	H	-2.502196	6.838485	1.285101
9	C	13.826169	-2.985473	-1.938358	90	C	1.601172	1.839022	-0.716964	171	H	-3.495555	8.297014	1.115399
10	C	13.877523	-0.609876	-0.424837	91	H	3.559290	1.378865	-1.499601	172	H	-6.459031	6.787396	-0.504339
11	H	11.911495	1.131991	-1.147641	92	C	-0.271747	0.739170	-1.802227	173	H	-6.273151	7.089243	1.242493
12	H	10.066068	0.675468	-2.697970	93	H	0.246105	-0.570710	-3.439459	174	H	-5.682931	8.275067	0.062164
13	C	14.833646	-1.602239	-0.228542	94	C	0.234689	1.612460	-0.823263	175	C	-1.672959	0.460328	-1.853133
14	C	14.813244	-2.785923	-1.008118	95	H	1.980172	2.509674	0.052602	176	C	-2.872331	0.197505	-1.803946
15	H	15.565775	-3.556188	-0.859287	96	C	2.002252	-0.339608	2.573188	177	Pt	-4.772696	-0.345909	-1.638749
16	C	13.877798	0.609680	0.425119	97	C	0.624611	-0.108265	2.676641	178	N	-5.733304	1.395019	-2.142906
17	C	14.834256	1.601695	0.228675	98	C	2.488575	-1.206432	1.579954	179	N	-6.668491	-0.943185	-1.518745
18	C	12.869410	0.800620	1.408953	99	C	-0.270289	-0.736593	1.800718	180	N	-4.505019	-2.313341	-1.113580
19	C	14.814368	2.785415	1.008206	100	H	0.247348	0.573100	3.438162	181	C	-5.182959	2.571141	-2.456461
20	C	12.819460	2.017873	2.154842	101	C	1.602761	-1.836329	0.715582	182	C	-7.101996	1.288779	-2.113402
21	C	11.866571	-0.175030	1.665636	102	H	3.560783	-1.376233	1.498489	183	C	-7.633426	-0.051097	-1.785847
22	C	13.827474	2.985353	1.938556	103	C	0.236262	-1.609767	0.821713	184	C	-6.908589	-2.229552	-1.224424
23	H	15.567150	3.555409	0.859251	104	H	1.981860	-2.506921	-0.053989	185	C	-5.675876	-3.010182	-0.997797
24	C	11.751551	2.254237	3.049446	105	H	-0.456449	-2.101012	0.138941	186	C	-3.346942	-2.953241	-0.909754
25	C	10.839970	0.073866	2.533126	106	H	-0.458095	2.103754	-0.140607	187	C	-5.946161	3.694743	-2.742284
26	H	11.911285	-1.131490	1.148277	107	C	-1.671532	-0.457949	1.851654	188	H	-4.095563	2.602579	-2.473328
27	H	13.801182	3.910348	2.514617	108	C	-2.871012	-0.195577	1.802712	189	C	-7.899719	2.385882	-2.376828
28	C	10.747439	1.318736	3.221491	109	Pt	-4.771800	0.346516	1.638201	190	C	-8.960877	-0.459738	-1.748808
29	H	11.708408	3.207013	3.577886	110	N	-5.730723	-1.395205	2.142810	191	C	-8.220842	-2.679602	-1.174478
30	H	10.066192	-0.674242	2.698794	111	N	-6.668133	0.942282	1.519145	192	C	-5.671687	-4.363669	-0.697484
31	O	15.751465	-1.365857	0.732749	112	N	-4.506008	2.314166	1.112779	193	C	-3.293825	-4.301806	-0.605134
32	O	15.751885	1.364945	-0.732710	113	C	-5.179313	-2.570978	2.455806	194	H	-2.447443	-2.350721	-1.013204
33	C	9.579336	-1.578555	-3.993293	114	C	-7.099511	-1.290020	2.114085	195	C	-7.337798	3.629427	-2.703404
34	C	8.517414	-1.743142	-4.563231	115	C	-7.632187	0.049471	1.787019	196	H	-5.422962	4.611665	-2.998934
35	C	9.580305	1.580044	3.993918	116	C	-6.909441	2.228454	1.224988	197	H	-8.981256	2.269407	-2.331776
36	C	8.518396	1.744885	4.563806	117	C	-5.677490	3.010035	0.997468	198	C	-9.274949	-1.794991	-1.448001
37	C	16.738119	-2.345544	1.045336	118	C	-3.348561	2.954986	0.908264	199	H	-9.746768	0.256156	-1.974709
38	H	17.190910	-2.745408	0.124677	119	C	-5.941496	-3.695237	2.741796	200	H	-8.419837	-3.722482	-0.938210
39	H	17.524183	-1.786520	1.569196	120	H	-4.091883	-2.601612	2.472008	201	C	-4.469105	-5.053803	-0.512955
40	C	16.738784	2.344316	-1.045515	121	C	-7.896238	-2.387789	2.377704	202	H	-6.625522	-4.880689	-0.625541
41	H	17.191873	2.744062	-0.124951	122	C	-8.959974	0.457103	1.751152	203	H	-2.317524	-4.759329	-0.460651
42	H	17.524577	1.785034	-1.569507	123	C	-8.222082	2.677496	1.176137	204	C	-8.235104	4.826132	-2.969977
43	C	16.205369	3.448433	-1.933438	124	C	-5.674552	4.363448	0.696793	205	C	-10.723570	-2.266861	-1.374927
44	H	15.792385	2.996995	-2.849354	125	C	-3.296676	4.303530	0.603334	206	C	-4.40494	-6.546458	-0.233764
45	H	15.370290	3.967550	-1.436351	126	H	-2.448519	2.353227	1.011392	207	C	-8.959878	5.185672	-1.666058
46	C	16.204517	-3.449513	1.933331	127	C	-7.333207	-3.630969	2.703735	208	C	-9.266397	4.467715	-4.045249
47	H	15.791840	-2.997961	2.849329	128	H	-5.417422	-4.611835	2.997841	209	C	-7.441946	6.040110	-3.443278
48	H	15.369183	-3.968350	1.436381	129	H	-8.977889	-2.272123	2.333264	210	C	-10.847895	-3.752043	-1.722228
49	C	17.292036	4.452868	-2.288430	130	C	-9.275294	1.792127	1.450611	211	C	-11.217682	-2.051355	0.062011
50	H	18.130347	3.927352	-2.773586	131	H	-9.745092	-0.259410	1.977752	212	C	-11.618381	-1.476938	-2.331713
51	H	17.700192	4.888832	-1.362148	132	H	-8.422068	3.720221	0.940038	213	C	-3.782482	-6.766517	1.149249
52	C	17.290925	-4.454300	2.288115	133	C	-4.472627	5.054526	0.511479	214	C	-3.528995	-7.212365	-1.301914
53	H	18.129490	-3.929059	2.773129	134	H	-6.628821	4.879712	0.625183	215	C	-5.781921	-7.200854	-0.263751
54	H	17.698779	-4.890385	1.361756	135	H	-2.320799	4.761811	0.458330	216	H	-8.243713	5.409147	-0.859629
55	C	16.778514	5.556891	-3.195966	136	C	-8.229497	-4.828361	2.970632	217	H	-9.582657	6.077408	-1.823674
56	H	15.958805	6.111638	-2.717514	137	C	-10.724311	2.262966	1.378781	218	H	-9.618335	4.373454	-1.326574
57	H	17.566840	6.278156	-3.447003	138	C	-4.409936	6.547116	0.231603	219	H	-8.774866	4.179632	-4.984925
58	H	16.390985	5.145074	-4.138673	139	C	-8.954698	-5.188365	1.667083	220	H	-9.925255	3.645308	-3.735945
59	C	16.777206	-5.558167	3.195730	140	C	-9.260530	-4.470745	4.046427	221	H	-9.901600	5.341039	-4.247659
60	H	15.957234	-6.112644	2.717415	141	C	-7.435215	-6.041796	3.443459	222	H	-6.722662	6.386666	-2.686714
61	H	17.565341	-6.279691	3.446622	142	C	-10.849402	3.748121	1.725890	223	H	-6.891777	5.833150	-4.372092
62	H	16.389977	-5.146237	4.138511	143	C	-11.219423	2.046892	-0.057720	224	H	-8.134033	6.869234	-3.641198

Table S1. Cont.

No.	Atom	X	Y	Z	No.	Atom	X	Y	Z	No.	Atom	X	Y	Z
63	C	7.205708	-1.896748	-5.100640	144	C	-11.617731	1.472550	2.336457	225	H	-10.369421	-4.403533	-0.978471
64	C	6.948914	-2.638416	-6.263840	145	C	-3.788898	6.766972	-1.152111	226	H	-11.910786	-4.026078	-1.748409
65	C	6.138098	-1.296527	-4.422024	146	C	-3.533454	7.214257	1.298578	227	H	-10.416564	-3.975537	-2.708199
66	C	5.644945	-2.772230	-6.728226	147	C	-5.787335	7.200487	0.262572	228	H	-11.209325	-0.986566	0.333298
67	H	7.776132	-3.106426	-6.794270	148	H	-8.238832	-5.411724	0.860349	229	H	-12.250042	-2.416902	0.157085
68	C	4.824835	-1.439505	-4.884078	149	H	-9.577061	-6.080317	1.825125	230	H	-10.596275	-2.595722	0.789131
69	H	6.330635	-0.722733	-3.516926	150	H	-9.613630	-4.376458	1.327763	231	H	-12.634339	-1.892306	-2.300395
70	C	4.583933	-2.183214	-6.050086	151	H	-8.768761	-4.182330	4.985876	232	H	-11.699326	-0.416539	-2.058219
71	H	5.452395	-3.347411	-7.631929	152	H	-9.920137	-3.648813	3.737452	233	H	-11.257847	-1.541660	-3.368046
72	H	3.563883	-2.294836	-6.413123	153	H	-9.894990	-5.344546	4.249101	234	H	-3.693315	-7.844215	1.345488
73	C	7.206595	1.898617	5.100951	154	H	-6.716019	-3.877729	2.686525	235	H	-2.779631	-6.325623	1.226964
74	C	6.949582	2.640327	6.264074	155	H	-6.884773	-5.834510	4.372038	236	H	-4.411522	-6.331327	1.939964
75	C	6.139096	1.298500	4.422067	156	H	-8.126592	-6.871458	3.641609	237	H	-3.941004	-7.052084	-2.308129
76	C	5.645507	2.774267	6.728127	157	H	-10.372153	4.399817	0.981524	238	H	-2.498000	-6.835841	-1.289130
77	H	7.776713	3.108269	6.794700	158	H	-11.912472	4.021373	1.753006	239	H	-3.490156	-8.295203	-1.119406
78	C	4.825725	1.441644	4.883760	159	H	-10.417317	3.972178	2.711401	240	H	-6.453242	-6.788465	0.503866
79	H	6.331805	0.724691	3.517016	160	H	-11.210690	0.982054	-0.328792	241	H	-6.268661	-7.089673	-1.243220
80	C	4.584604	2.185371	6.049712	161	H	-12.252039	2.411889	-0.152106	242	H	-5.676547	-8.275414	-0.063755
81	H	5.452784	3.349468	7.631782	162	H	-10.598800	2.591444	-0.785363					
Unfolded structure (all-transoid conformation) of (S)-2														
1	C	-4.189315	3.252905	0.393315	82	H	10.815745	-0.675619	-2.238989	163	H	26.070277	-5.930781	-0.486401
2	C	-4.058650	3.971008	-0.782247	83	C	-11.009769	0.614801	-0.040850	164	H	25.426988	-4.701421	0.616877
3	C	-2.870894	4.672524	-1.079406	84	C	-11.988978	0.650185	-0.759955	165	H	24.426093	-6.101699	0.167667
4	C	-1.777940	4.645911	-0.160429	85	C	11.126668	1.025080	-0.206413	166	H	15.886953	-5.845788	-5.645962
5	C	-1.933199	3.889345	1.033150	86	C	12.162683	1.226669	0.396269	167	H	15.459494	-5.403663	-3.983226
6	C	-3.093799	3.217005	1.304450	87	C	-13.149646	0.690916	-1.585376	168	H	15.842764	-4.137056	-5.177855
7	H	-3.561713	5.413821	-2.989009	88	C	-13.100874	1.277259	-2.860500	169	H	18.948092	-6.855162	-3.825823
8	H	-4.882204	4.003563	-1.496127	89	C	-14.354452	0.149711	-1.119715	170	H	17.310388	-6.964181	-3.138693
9	C	-2.731554	5.401894	-2.282735	90	C	-14.244770	1.316305	-3.648072	171	H	17.595741	-7.381446	-4.843572
10	C	-0.588061	5.364456	-0.455684	91	H	-12.163298	1.696900	-3.220694	172	H	18.230340	-3.872167	-6.034684
11	H	-1.106404	3.842647	1.741067	92	C	-15.509674	0.190484	-1.910408	173	H	19.500613	-5.007349	-5.522063
12	H	-3.195057	2.643130	2.224550	93	H	-14.394146	-0.305278	-0.130642	174	H	18.157106	-5.578619	-6.530016
13	C	-0.500877	6.079013	-1.646691	94	C	-15.440648	0.782549	-3.183278	175	C	-16.736349	-0.354823	-1.423444
14	C	-1.578621	6.085221	-2.567211	95	H	-14.204405	1.771089	-4.636170	176	C	-17.789829	-0.821543	-0.997455
15	H	-1.502260	6.636083	-3.501388	96	C	13.380112	1.461922	1.097801	177	Pt	-19.483769	-1.571819	-0.301956
16	C	0.559949	5.363354	0.487424	97	C	14.535258	0.749174	0.753467	178	N	-20.817308	-0.738272	-1.618224
17	C	0.475182	6.076231	1.679508	98	C	13.432157	2.404456	2.137542	179	N	-21.185121	-2.328068	0.398898
18	C	1.749404	4.645332	0.188599	99	C	15.740150	0.968780	1.433234	180	N	-18.766358	-2.676999	1.269154
19	C	1.555988	6.083361	2.596495	100	H	14.496380	0.016778	-0.052246	181	C	-20.550685	0.078211	-2.646426
20	C	2.845656	4.673747	1.103534	101	C	14.625735	2.623603	2.813842	182	C	-22.116873	-1.087069	-1.368989
21	C	1.900566	3.886850	-1.004271	102	H	12.532872	2.957432	2.403086	183	C	-22.328030	-1.996575	-0.224317
22	C	2.709347	5.402674	2.307492	103	C	15.771555	1.915992	2.470984	184	C	-21.126542	-3.139303	1.462535
23	H	1.481751	6.633297	3.531396	104	H	14.663381	3.355326	3.618910	185	C	-19.751231	-3.337519	1.961513
24	C	4.033497	3.974205	0.801904	105	H	16.706475	2.089020	3.002502	186	C	-17.498553	-2.809288	1.667246
25	C	3.060215	3.213955	-1.278499	106	H	-16.337187	0.817366	-3.800926	187	C	-21.545945	0.581525	-3.463844
26	H	1.071254	3.838720	-1.709151	107	C	16.912502	0.236224	1.075314	188	H	-19.502749	0.323336	-2.802344
27	H	3.541977	5.415966	3.010825	108	C	17.916257	-0.397609	0.759254	189	C	-23.146206	-0.602282	-2.159329
28	C	4.159816	3.253643	-0.372611	109	Pt	19.523353	-1.427576	0.237665	190	C	-23.522948	-2.517797	0.244205
29	H	4.860096	4.009155	1.512147	110	N	20.898038	-0.647904	1.545345	191	C	-22.302937	-3.682600	1.966681
30	H	3.157972	2.638014	-2.197676	111	N	21.136507	-2.463697	-0.292884	192	C	-19.439913	-4.124686	3.052026
31	O	0.643353	6.771174	-1.844687	112	N	18.733417	-2.582826	-1.262544	193	C	-17.139851	-3.589227	2.757594
32	O	-0.669601	6.766236	1.882139	113	C	20.700930	0.292705	2.478859	194	H	-16.755266	-2.267915	1.086349
33	C	-5.387606	2.549687	0.697574	114	C	22.145819	-1.192030	1.408047	195	C	-22.884911	0.251456	-3.234831
34	C	-6.403549	1.943471	0.979936	115	C	22.286184	-2.219417	0.357118	196	H	-21.258067	1.236640	-4.282915
35	C	5.358446	2.552179	-0.680597	116	C	21.018465	-3.356744	-1.283326	197	H	-24.164169	-0.899554	-1.924009
36	C	6.375314	1.948743	-0.965458	117	C	19.650270	-3.430816	-1.833296	198	C	-23.524359	-3.376851	1.355943
37	C	0.919229	7.355315	-3.114937	118	C	17.476659	-2.593487	-1.714014	199	H	-24.456353	-2.264726	-0.253930
38	H	0.059741	7.947518	-3.465840	119	C	21.716287	0.728147	3.310652	200	H	-22.263384	-4.343257	2.827929
39	H	1.734174	8.063587	-2.919275	120	H	19.692980	0.695291	2.545996	201	C	-18.113008	-4.271700	3.483656
40	C	-0.942459	7.347332	3.154474	121	C	23.192242	-0.787335	2.220435	202	H	-20.246423	-4.632883	3.576431
41	H	-0.083419	7.941567	3.503064	122	C	23.425014	-2.919879	-0.004249	203	H	-16.087384	-3.645468	3.019433
42	H	-1.760256	8.053477	2.963096	123	C	22.136346	-4.084204	-1.676306	204	C	-23.977939	0.806906	-4.133300
43	C	-1.366205	6.318710	4.181430	124	C	19.282033	-4.284202	-2.854105	205	C	-24.848048	-3.940743	1.854858

**Table S1.** Cont.

No.	Atom	X	Y	Z	No.	Atom	X	Y	Z	No.	Atom	X	Y	Z
44	H	-2.271644	5.806968	3.817621	125	C	17.062977	-3.432468	-2.739242	206	C	-17.799700	-5.135244	4.693613
45	H	-0.588308	5.544270	4.283668	126	H	16.788703	-1.903052	-1.231272	207	C	-23.932055	2.338557	-4.084863
46	C	1.350011	6.329505	-4.141671	127	C	23.001820	0.189196	3.202164	208	C	-25.368140	0.348121	-3.705639
47	H	2.255447	5.819909	-3.774844	128	H	21.485930	1.495052	4.046721	209	C	-23.722671	0.328337	-5.567114
48	H	0.574742	5.552960	-4.247936	129	H	24.165149	-1.249960	2.078721	210	C	-24.669637	-4.859044	3.059729
49	C	-1.632170	6.959240	5.535741	130	C	23.362798	-3.870640	-1.037013	211	C	-25.761024	-2.778250	2.262045
50	H	-2.375388	7.764367	5.418677	131	H	24.364313	-2.726857	0.509332	212	C	-25.504496	-4.742993	0.725093
51	H	-0.709792	7.445132	5.892788	132	H	22.049446	-4.809659	-2.479761	213	C	-16.304564	-5.183741	4.991440
52	C	1.619621	6.972772	-5.493950	133	C	17.965732	-4.307304	-3.339106	214	C	-18.293419	-6.562566	4.432509
53	H	2.359024	7.780764	-5.372487	134	H	20.035807	-4.943858	-3.279053	215	C	-18.524821	-4.554400	5.913121
54	H	0.696937	7.455298	-5.854757	135	H	16.024001	-3.382860	-3.051420	216	H	-22.974384	2.737559	-4.444196
55	C	-2.119143	5.954056	6.564611	136	C	24.114926	0.664852	4.121110	217	H	-24.725564	2.749916	-4.724284
56	H	-1.384206	5.149569	6.710996	137	C	24.625915	-4.625289	-1.429916	218	H	-24.094320	2.707388	-3.062383
57	H	-2.296385	6.423814	7.540669	138	C	17.587553	-5.251540	-4.467809	219	H	-25.472054	-0.745223	-3.747965
58	H	-3.060323	5.485204	6.244149	139	C	24.323414	2.168129	3.905469	220	H	-25.617353	0.682236	-2.688571
59	C	2.115575	5.970850	-6.521658	140	C	25.433486	-0.053725	3.853680	221	H	-26.114820	0.776695	-4.387257
60	H	1.384711	5.163462	-6.672389	141	C	23.701155	0.406478	5.574382	222	H	-22.749498	0.665572	-5.947771
61	H	2.295356	6.442482	-7.496347	142	C	24.374295	-5.635047	-2.545737	223	H	-23.752611	-0.768579	-5.629027
62	H	3.057227	5.505583	-6.197390	143	C	25.671763	-3.614614	-1.915395	224	H	-24.500255	0.727780	-6.233132
63	C	-7.589085	1.232166	1.320880	144	C	25.162923	-5.377351	-0.207011	225	H	-24.232052	-4.331683	3.918957
64	C	-7.651170	0.494428	2.515019	145	C	16.109893	-5.144910	-4.830548	226	H	-25.652066	-5.237647	3.371587
65	C	-8.704591	1.266332	0.475105	146	C	17.882825	-6.692792	-4.036713	227	H	-24.039019	-5.728252	2.825880
66	C	-8.809527	-0.194745	2.850467	147	C	18.422962	-4.902703	-5.705218	228	H	-25.980629	-2.105076	1.422847
67	H	-6.782937	0.470743	3.171257	148	H	23.419881	2.747766	4.135886	229	H	-26.717841	-3.174890	2.629381
68	C	-9.871786	0.572137	0.815230	149	H	25.127661	2.525716	4.563549	230	H	-25.308096	-2.183731	3.067798
69	H	-8.664819	1.837648	-0.450827	150	H	24.612256	2.382946	2.867063	231	H	-26.460781	-5.155328	1.075981
70	C	-9.917027	-0.160753	2.012760	151	H	25.351904	-1.137956	4.014647	232	H	-25.712966	-4.124846	-0.158072
71	H	-8.849936	-0.764094	3.777081	152	H	25.796738	0.119969	2.831009	233	H	-24.866626	-5.581764	0.413055
72	H	-10.826582	-0.698925	2.273660	153	H	26.197689	0.326641	4.544390	234	H	-16.132129	-5.821312	5.868753
73	C	7.564910	1.241764	-1.302427	154	H	22.788400	0.951822	5.847969	235	H	-15.733559	-5.609758	4.154664
74	C	7.564285	0.315208	-2.358507	155	H	23.527321	-0.663875	5.753723	236	H	-15.897989	-4.188650	5.219580
75	C	8.748633	1.471233	-0.590397	156	H	24.502861	0.738390	6.248765	237	H	-19.376949	-6.602734	4.260033
76	C	8.727676	-0.368631	-2.688036	157	H	24.023822	-5.151506	-3.468316	238	H	-17.790821	-7.002669	3.559918
77	H	6.643250	0.139505	-2.911473	158	H	25.314158	-6.151720	-2.781130	239	H	-18.071436	-7.192050	5.305537
78	C	9.920695	0.782673	-0.924901	159	H	23.641049	-6.399255	-2.252008	240	H	-18.199024	-3.524161	6.113992
79	H	8.757956	2.190824	0.226689	160	H	25.946294	-2.893408	-1.134527	241	H	-19.615317	-4.549505	5.784292
80	C	9.902396	-0.141953	-1.982110	161	H	26.585444	-4.146913	-2.214691	242	H	-18.296141	-5.162269	6.799702
81	H	8.718856	-1.086364	-3.506197	162	H	25.304303	-3.053705	-2.786153					