Supporting Information 2

Efficient Stereochemical Controllers in Biaryl Suzuki Coupling Reactions: Benzylic Carbinols bearing in β Position Thioether, Dimethylamino or Sulfoxide Groups.

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Copies of ^1H and ^{13}C NMR spectras

Compound 1

Current Data Parameters
 NAME_1 peb573r.329
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters

Date_ 20030716
 Time 10.09
 INSTRUM spect
 PROBD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 1149.4
 DM 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300300 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FLIP 11.000 ppm
 F1 3301.43 Hz
 F2P -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07802 Hz/cm

Compound 2

Current Data Parameters
 NAME peb573.329
 EXPNO 20
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20030718
 Time 6.21
 INSTRUM spect
 PROBD 5 mm Dual 13C/
 PULPROG zgpg30
 TD 65536
 ID CUC13
 SOLVENT CDCl3
 NS 512
 DS 4
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 16384
 DW 27.800 usec
 DE 6.50 usec
 TE 300.0 K
 CNST2 145.0000000
 CNST11 1.0000000
 d1 2.00000000 sec
 d13 0.00000300 sec
 d20 0.00689655 sec
 DELTA 0.00000700 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 5.50 usec
 P2 11.00 usec
 PL1 -6.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 0.00 dB
 PL12 20.50 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDM EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FIP 215.000 ppm
 F1 16225.57 Hz
 F2 -5.000 ppm
 F2 -377.34 Hz
 PPMCM 11.00000 ppm/cm
 HZCM 830.14526 Hz/cm

Current Data Parameters
 NAME peb429r.302
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20030110
 Time 11.26
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 812.7
 DW 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300300 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FLIP 11.000 ppm
 F1 3301.43 Hz
 F2P -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07802 Hz/cm

Current Data Parameters
 NAME peb429b2.303
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20030115
 Time 22.13
 INSTRUM spect
 PROHD 5 mm Dual 13C/
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 1024
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 456.1
 DW 27.800 usec
 DE 6.50 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec
 d12 0.00002000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 5.50 usec
 PL1 -6.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 0.00 dB
 PL12 20.50 dB
 PL13 20.50 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FIP 215.000 ppm
 F1 16225.57 Hz
 F2 -5.000 ppm
 F2 -377.34 Hz
 PPMCM 11.00000 ppm/cm
 HZCM 830.14526 Hz/cm

Current Data Parameters
 NAME peb594.336
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20030905
 Time 7.17
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 645.1
 DW 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300300 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FLP 11.000 ppm
 F1 3301.43 Hz
 F2 -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07802 Hz/cm

Compound 4

wdi

Current Data Parameters
 NAME peb618a.341
 EXPNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20031008
 Time 19.05
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG jmod
 TD 65536
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 16384
 DW 27.800 usec
 DE 6.50 usec
 TE 300.0 K
 CNST2 145.0000000
 CNST11 1.0000000
 D1 2.0000000 sec
 d13 0.0000300 sec
 d20 0.00689655 sec
 DELTA 0.0000700 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 5.50 usec
 P2 11.00 usec
 P11 -6.00 dB
 SF01 75.4752953 MHz

===== CHANNEL f2 =====
 CDPFG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 P12 0.00 dB
 P112 20.50 dB
 SF02 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters
 CY 20.00 cm
 CY 12.50 cm
 F1P 215.000 ppm
 F1 16225.57 Hz
 F2P -5.000 ppm
 F2 -377.34 Hz
 PPMCM 11.00000 ppm/cm
 HZCM 830.14526 Hz/cm

Compound 6.

Current Data Parameters
 NAME peb620.341
 EXPNO 11
 PROCNO 1

F2 - Acquisition Parameters

Date_ 20031011
 Time 17.39
 INSTRUM spect
 PROBD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDC13
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 912.3
 DW 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.0000000 sec

===== CHANNEL f1 =====

NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters

SI 32768
 SF 300.1300300 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters

CX 20.00 cm
 CY 12.50 cm
 F1P 11.000 ppm
 F1 3301.43 Hz
 F2P -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07802 Hz/cm

Current Data Parameters
 NAME peb625.342
 EXPNO 21
 PROCNO 1

F2 - Acquisition Parameters

Date_ 20031019
 Time 4.24
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl3
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 645.1
 DW 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====

NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters

SI 32768
 SF 300.1300300 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters

CX 20.00 cm
 CY 12.50 cm
 F1P 11.000 ppm
 F1 3301.43 Hz
 F2P -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07802 Hz/cm

Current Data Parameters
 NAME peb625.342
 EXPNO 20
 PROCNO 1

F2 - Acquisition Parameters

Date_ 20031019
 Time 4.22
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG jmod
 TD 65536
 SOLVENT CDCl3
 NS 1024
 DS 4
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 16384
 DW 27.800 usec
 DE 6.50 usec
 TE 300.0 K
 CNST2 145.0000000
 CNST11 1.0000000
 D1 2.0000000 sec
 d13 0.0000300 sec
 d20 0.00689655 sec
 DELTA 0.0000700 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 5.50 usec
 P2 11.00 usec
 PL1 -6.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 0.00 dB
 PL12 20.50 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters

SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

1D NMR plot parameters

CX 20.00 cm
 CY 12.50 cm
 FIP 215.000 ppm
 F1 16225.57 Hz
 F2P -5.000 ppm
 F2 -377.34 Hz
 PPMCM 11.00000 ppm/cm
 HZCM 830.14526 Hz/cm

Compound 8.

Compound 3.

Current Data Parameters
 NAME peb781.420
 EXNO 10
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20040513
 Time 10.33
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG zg30
 TD 32768
 SOLVENT CDCl₃
 NS 16
 DS 2
 SWH 6172.839 Hz
 FIDRES 0.188380 Hz
 AQ 2.6542580 sec
 RG 203.2
 DW 81.000 usec
 DE 6.50 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 8.60 usec
 PL1 0.00 dB
 SFO1 300.1318534 MHz

F2 - Processing parameters
 SI 32768
 SF 300.1300030 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 F1P 11.000 ppm
 F1 3301.43 Hz
 F2P -1.000 ppm
 F2 -300.13 Hz
 PPMCM 0.60000 ppm/cm
 HZCM 180.07800 Hz/cm

Current Data Parameters
 NAME peb781.420
 EXPNO 20
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20040514
 Time 18.35
 INSTRUM spect
 PROBHD 5 mm Dual 13C/
 PULPROG jmod
 TD 65536
 SOLVENT CDCl3
 NS 344
 DS 4
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 16384
 DW 27.800 usec
 DE 6.50 usec
 TE 300.0 K
 CNST2 145.0000000
 CNST11 1.0000000
 D1 2.00000000 sec
 d13 0.00000300 sec
 d20 0.00689655 sec
 DELTA 0.00000700 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 5.50 usec
 PL1 11.00 usec
 PL12 -6.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 80.00 usec
 PL2 0.00 dB
 PL12 20.50 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

LD NMR plot parameters
 CX 20.00 cm
 CY 12.50 cm
 FIP 215.000 ppm
 F1 16225.57 Hz
 F2 -5.000 ppm
 F2 -377.34 Hz
 PPMCM 11.00000 ppm/cm
 HZCM 830.14526 Hz/cm