SUPPORTING INFORMATION

for

Asymmetric Hydrogenation of α -Hydroxy Ketones Catalyzed by

MsDPEN–Cp*Ir(III) Complex

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NMR and GLC charts of catalysts and products-1

¹H-NMR chart of (S,S)-1a

¹H-NMR chart of (S,S)-1a (continued): expansion at δ 4.3–6.2

(Signals at 5.32 ppm are those of CDHCl₂.)

¹³C-NMR chart of (S,S)-1a

IR chart of (S,S)-1a

¹H-NMR chart of (S,S)-1b

¹³C-NMR chart of (S,S)-1b

DRIF	00014-1780-CNAAR-2355-1.gzi
CONTENT	C:\msdcs\cnaar\00014-1780-CNAAR-2355-1.gzi
DATUM	21-09-2006 07:13:32
CONC	13C
EXAMID	sample.gzi
ORFID	160.53 MHz
ORSET	5.65 kHz
ORPIN	3.86 Hz
POINT	32768
FREQSU	31.607.03 Hz
SCANS	14000
ACQTM	1.0413 sec
PD	2.0000 sec
PW1	3.20 msec
IRNUC	1H
CTEAP	22.3 e
SLVNT	CDCl3
EXHP	0.00 ppm
BP	0.48 Hz
RCAIN	38

IR chart of (S,S)-1b

¹H-NMR chart of (R)-4a

DEFILE
 02014-1710-15NMR-2004-1.MR
 COMMENT
 NU-1710A-1
 09-04-2007 15:52:33
 1H
 400 MHz
 299.15 MHz
 4.19 KHz
 7.29 Hz
 16384
 1563.00 Hz
 8
 2.1857 sec
 5.0903 sec
 5.70 msec
 1H
 22.7 °C
 CDCl₃
 0.00 ppm
 0.23 Hz
 36
 RCMAN

¹³C-NMR chart of (*R*)-4a

08014-1710-CNMR-2605-1.MF
 NU-1710A-1
 09-04-2007 16:13:13
 13C
 single pulse dec
 100.53 MHz
 5.35 KHz
 5.96 Hz
 32768
 POINT
 31407.03 Hz
 355
 SCANS
 ACQTM
 1.0433 sec
 2.0000 sec
 9.20 umc
 PW1
 IRNLC
 CTBAP
 SLANT
 EXOEP
 BP
 RCAN

1H 24.8 e
 CDCL3
 77.00 ppm
 0.48 Hz
 60

HPLC charts of (R)-4a and (±)-4a

peak	area[uV.Sec]	area, %
36.858	16118144.750	98.005
51.625	328109.500	1.995

peak	area[uV.Sec]	area, %
37.217	781714.517	50.440
50.383	768070.180	49.560

¹³C-NMR chart of (R)-4b

¹H-NMR chart of (*R*)-4c

¹³C-NMR chart of (*R*)-4c

¹H-NMR chart of (R)-4d

^{13}C -NMR chart of (*R*)-4d

DE-LE	0210-1558-CNMR-2630-1- μ
CONYT	NU-19846-1-1
DATAM	12-04-2007 17:59:33
ORNLIC	13C
EXORD	
CHERRA	aliquo pulvis sec
ORBERT	107.53 MHz
ORBERT	5.25 kHz
ORBERT	5.46 Hz
POINT	327.076
PREFCU	31.407, 203 Hz
SCANS	659
ACQTM	1.0433 sec
PD	2.0900 sec
PW1	3.20 msec
IRNLIC	1H
CTEAP	24.5 e
SLVNT	CDCl ₃
EXORF	77.00 ppm
BP1	0.48 Hz
BCAIN	60