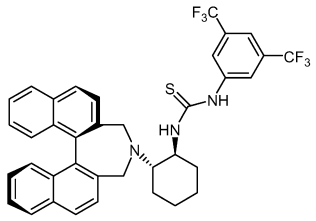
Dezhan Chen *, Nan Lu, Guiqiu Zhang, Shizhen Mi

Tetrahedron: Asymmetry *20 (2009) 1365*

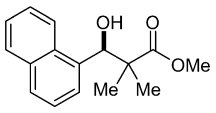


$C_{37}H_{31}F_6N_3S$

$[\alpha]_D^{20} = -30.5$ (*c* 0.8, $CHCl_3$)

Yasushi Shimoda, Teppei Tando, Shunsuke Kotani *, Masaharu Sugiura, Makoto Nakajima *

Tetrahedron: Asymmetry *20 (2009) 1369*



$C_{16}H_{18}O_3$

(*R*)-Methyl 3-hydroxy-2,2-dimethyl-3-(naphthalen-1-yl)propanoate

Ee = 67%
$[\alpha]_D^{25} = -17.8$ (*c* 1.06, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configurations: (*R*)

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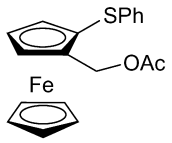
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{19}H_{18}FeO_2S$

(R_{Fc})-2-Acetoxymethyl-1-phenylthioferrocene

Chiral HPLC analysis (*Chiralpak* AD column) (hexane/EtOH: 99/1; 1 mL/min): rt_1 = 9.5 min, rt_2 = 12.8 min.
Ee = 95%
$[\alpha]_D = +95.7$ (*c*1.45, CH_2Cl_2)
Absolute configuration: (R_{Fc})

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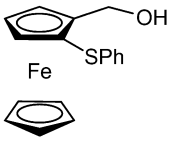
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{17}H_{16}FeOS$

(S_{Fc})-2-Hydroxymethyl-1-phenylthioferrocene

Ee = 99%
$[\alpha]_D = -56.2$ (*c* 1, CH_2Cl_2)
Absolute configuration: (S_{Fc})

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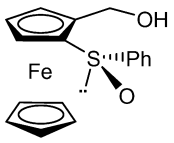
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{17}H_{16}FeO_2S$

2-Hydroxymethyl-1-phenylsulfinyl ferrocene

$[\alpha]_D = +381.5$ (c 1, CH_2Cl_2)
Absolute configuration: (S_{Fc},R_s)

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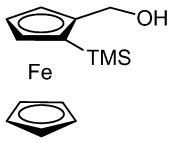
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{14}H_{20}FeOSi$

(S_{Fc})-2-Hydroxymethyl-1-trimethylsilyl ferrocene

$[\alpha]_D = -10.4$ (c 1, CH_2Cl_2)
Absolute configuration: (S_{Fc})

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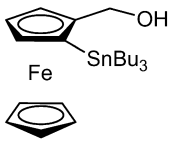
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{23}H_{38}FeOSn$

(S_{FC})-2-Hydroxymethyl-1-*tri*butylstannyl ferrocene

$[\alpha]_D = -1.6$ (c 1, CH_2Cl_2)
Absolute configuration: (S_{Fc})

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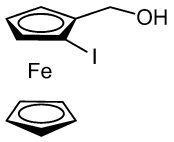
Tetrahedron: Asymmetry *20 (2009) 1371*



$C_{11}H_{11}FeIO$

(S_{FC})-2-Hydroxymethyl-1-iodoferrocene

$[\alpha]_D = +21.3$ (c 1, CH_2Cl_2)
Absolute configuration: (S_{Fc})

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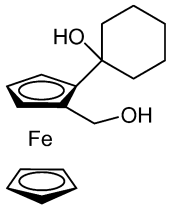
Tetrahedron: Asymmetry *20 (2009) 1371*



$[\alpha]_D = -5$ (c 1.5; CH_2Cl_2)
Absolute configuration: (R_{Fc})

$C_{17}H_{22}FeO_2$

(R_{FC})-2-Hydroxymethyl-1-ferrocenylcyclohexanol

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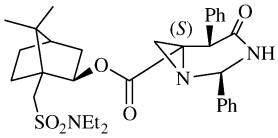
Tetrahedron: Asymmetry *20 (2009) 1378*



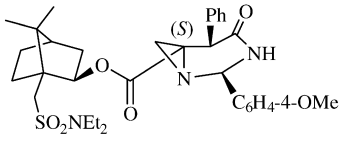
$[\alpha]_D^{20} = +0.14$ (c 5.71 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{32}H_{41}N_3O_5S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-4-oxo-2,5-diphenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



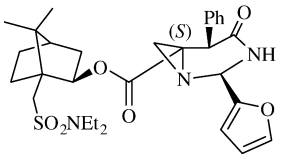
Impure **8b**; Diastereomeric ratio **8**:**9** (3.2: 1)
$[\alpha]_D^{20} = -30.0$ (c 0.60 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{33}H_{44}N_3O_6S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-2-methoxyphenyl-4-oxo-5-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



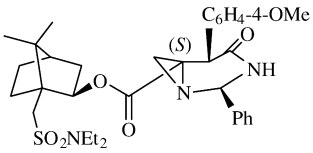
$[\alpha]_D^{20} = -4.7$ (c 4.00 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{30}H_{39}N_3NaO_6S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-2-furyl-4-oxo-5-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



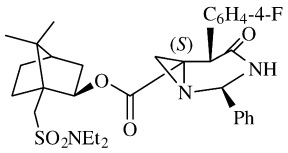
Impure **8d**; Diastereomeric ratio **8**:**9** (11.0: 1)
$[\alpha]_D^{20} = -19.8$ (*c* 0.33 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{33}H_{43}N_3NaO_6S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-5-methoxyphenyl-4-oxo-2-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



Impure **8e**; Diastereomeric ratio **8**:**9** (5.7: 1)
$[\alpha]_D^{20} = -45.0$ (*c* 0.40 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{32}H_{40}FN_3NaO_5S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-5-(4-fluorophenyl)-4-oxo-2-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

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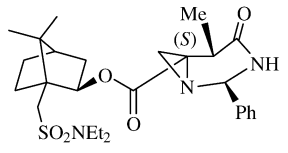
Tetrahedron: Asymmetry *20 (2009) 1378*



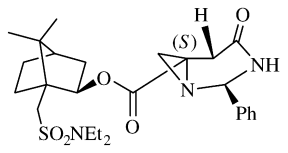
Impure **8f**; Diastereomeric ratio **8**:**9** (1.5: 1)
$[\alpha]_D^{20} = -51.7$ (*c* 0.13 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{27}H_{40}N_3O_5S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-2-methyl-4-oxo-5-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



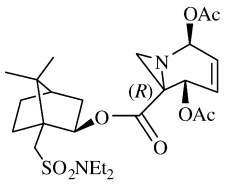
Impure **8g**; Diastereomeric ratio **8**:**9** (3.0: 1)
$[\alpha]_D^{20} = -59.6$ (*c* 0.09 g/100 ml, CH_2Cl_2)
Absolute configuration: (1*R*,6*S*)

$C_{26}H_{38}N_3O_5S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*S*)-4-oxo-5-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

Maria J. Alves *, Cátia Costa, Mário M. Durães

Tetrahedron: Asymmetry *20 (2009) 1378*



$[\alpha]_D^{20} = -77.5$ (*c* 2.00 g/100 mL, CH_2Cl_2)
Absolute configuration: (1*R*,6*R*)

$C_{26}H_{38}N_3O_5S$

[(1*R*)-10-(*N*,*N*-Diethylsulfamoyl)isobornyl] (6*R*)-4-oxo-5-phenyl-1,3-diazabicyclo[4.1.0]heptane-6-carboxylate

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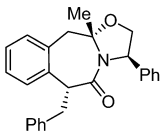
Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



>99% de
$[\alpha]_D = -103.4$ (*c* 0.84, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*R*,11a*S*)

$C_{26}H_{25}NO_2$

(3*R*,6*R*,11a*S*)-6-Benzyl-11a-methyl-3-phenyl-2,3,11,11a-tetrahydro[1,3]oxazolo[2,3-*b*]-[3]-benzazepin-5(6*H*)-one

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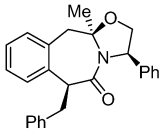
Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



>99% de
$[\alpha]_D = +40.3$ (*c* 1.24, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*S*,11a*S*)

$C_{26}H_{25}NO_2$

(3*R*,6*S*,11a*R*)-6-Benzyl-11a-methyl-3-phenyl-2,3,11,11a-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

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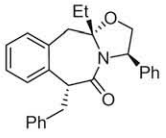
Tetrahedron: Asymmetry *20 (2009) 1383*



>99% de
$[\alpha]_D = -134.3$ (*c* 1.07, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*R*,11a*S*)

$C_{27}H_{27}NO_2$

(3*R*,6*R*,11a*S*)-6-Benzyl-11a-ethyl-3-phenyl-2,3,11,11a-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

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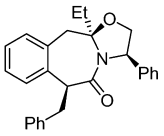
Tetrahedron: Asymmetry *20 (2009) 1383*



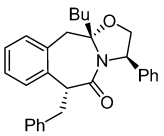
>99% de
$[\alpha]_D$ = +36.4 (*c* 1.19, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*S*,11a*R*)

$C_{27}H_{27}NO_2$

(3*R*,6*S*,11a*R*)-6-Benzyl-11a-ethyl-3-phenyl-2,3,11,11-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



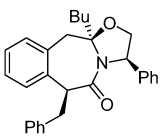
>99% de
$[\alpha]_D$ = −99.6 (*c* 0.66, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*R*,11a*S*)

$C_{29}H_{31}NO_2$

(3*R*,6*R*,11a*S*)-6-Benzyl-11a-butyl-3-phenyl-2,3,11,11a-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



>99% de
$[\alpha]_D$ = +25.5 (*c* 0.59, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*S*,11a*R*)

$C_{29}H_{31}NO_2$

(3*R*,6*S*,11a*R*)-6-Benzyl-11a-butyl-3-phenyl-2,3,11,11a-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

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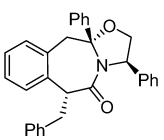
Tetrahedron: Asymmetry *20 (2009) 1383*



>99% de
$[\alpha]_D$ = −42.3 (*c* 0.82, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (3*R*,6*R*,11a*R*)

$C_{31}H_{27}NO_2$

(3*R*,6*R*,11a*R*)-6-benzyl-3,11a-diphenyl-2,3,11,11a-tetrahydro[1,3]oxazolo [2,3-*b*]-[3]-benzazepin-5(6*H*)-one

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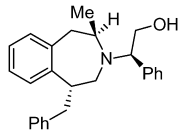
Tetrahedron: Asymmetry *20 (2009) 1383*



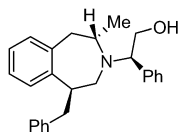
>99% de
$[\alpha]_D = -8.4$ (*c* 1.31, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*R*,4*R*)

$C_{26}H_{29}NO$

(*R*)-2-[(1*R*,4*R*)-1-Benzyl-4-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



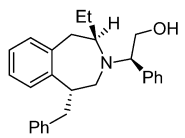
>99% de
$[\alpha]_D = +77.0$ (*c* 0.36, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*S*,4*S*)

$C_{26}H_{29}NO$

(*R*)-2-[(1*S*,4*S*)-1-Benzyl-4-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



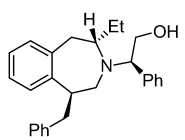
>99% de
$[\alpha]_D = -15.1$ (*c* 1.23, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*R*,4*R*)

$C_{27}H_{31}NO$

(*R*)-2-[(1*R*,4*R*)-1-Benzyl-4-ethyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



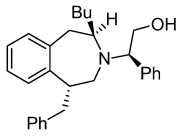
>99% de
$[\alpha]_D = +13.3$ (*c* 0.57, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*S*,4*S*)

$C_{27}H_{31}NO$

(*R*)-2-[(1*S*,4*S*)-1-Benzyl-4-ethyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



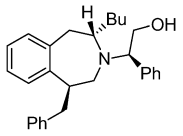
>99% de
$[\alpha]_D = -39.6$ (*c* 0.89, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*R*,4*R*)

$C_{29}H_{25}NO$

(*R*)-2-[(1*R*,4*R*)-1-Benzyl-4-butyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



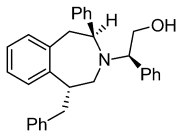
>99% de
$[\alpha]_D = +30.0$ (*c* 0.52, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*S*,4*S*)

$C_{29}H_{31}NO$

(*R*)-2-[(1*S*,4*S*)-1-Benzyl-4-butyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



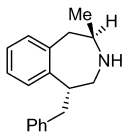
>99% de
$[\alpha]_D = -93.0$ (*c* 2.0, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (*R*,1*R*,4*S*)

$C_{31}H_{31}NO$

(*R*)-2-[(1*R*,4*S*)-1-Benzyl-4-phenyl-2,3,4,5-tetrahydro-1*H*-3-benzazepin-3-yl]-2-phenylethanol

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



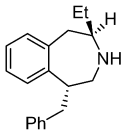
>99% ee
$[\alpha]_D = +25.4$ (*c* 0.63, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (1*R*,4*R*)

$C_{18}H_{21}N$

(1*R*,4*R*)-1-Benzyl-4-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



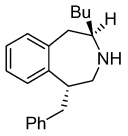
$C_{19}H_{23}N$

(1*R*,4*R*)-1-Benzyl-4-ethyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine

>99% ee
$[\alpha]_D$ = +19.2 (*c* 1.22, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (1*R*,4*R*)

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



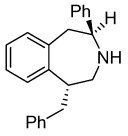
$C_{21}H_{27}N$

(1*R*,4*R*)-1-Benzyl-4-butyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine

99% ee
$[\alpha]_D$ = +21.0 (*c* 0.87, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (1*R*,4*R*)

Syed Masood Husain, Marie Theres Heim, Dirk Schepmann, Bernhard Wünsch *

Tetrahedron: Asymmetry *20 (2009) 1383*



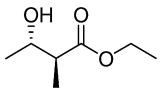
$C_{23}H_{23}N$

(1*R*,4*S*)-1-Benzyl-4-phenyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine

>99% ee
$[\alpha]_D$ = +41.5 (*c* 1.04, CH_2Cl_2)
Source of chirality: (*R*)-phenylglycinol
Absolute configuration: (1*R*,4*S*)

Silvana P. Ravía, Ignacio Carrera, Gustavo A. Seoane, Silvana Vero, Daniela Gamenara *

Tetrahedron: Asymmetry *20 (2009) 1393*



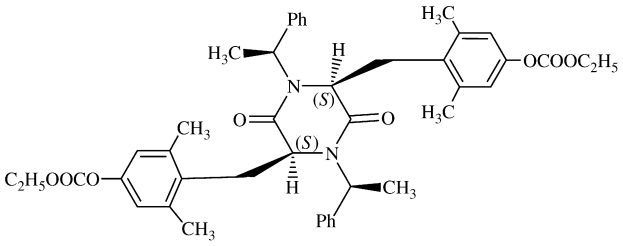
$C_7H_{14}O_3$

Ethyl 3-hydroxy-2-methylbutanoate

Ee = 94%
$[\alpha]_D^{20}$ = +22.5 (*c* 1.20, $CHCl_3$)
Source of chirality: enzymatic reduction (*Aureobasidium pullulans*)
Absolute configuration: (2*S*,3*S*)

Daniele Balducci *, Simone Contaldi, Ilaria Lazzari, Gianni Porzi *

Tetrahedron: Asymmetry *20 (2009) 1398*



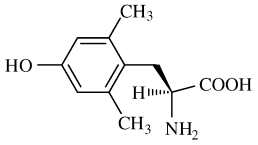
$[\alpha]_D = -61.1$ (c 0.9, $CHCl_3$)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: (3*S*,6*S*,1'*S*)

$C_{44}H_{50}N_2O_8$

(3*S*,6*S*)-1,4-*N*,*N*-[(*S*)-Phenylethyl]-3,6-bis[4-*O*-carbethoxy-2,6-dimethyl-benzyl]-piperazine-2,5-dione

Daniele Balducci *, Simone Contaldi, Ilaria Lazzari, Gianni Porzi *

Tetrahedron: Asymmetry *20 (2009) 1398*



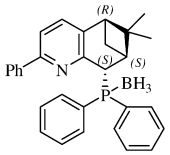
$[\alpha]_D = +72.9$ (c 0.5, 0.5M HCl)
Source of chirality: (*S*)-phenylethylamine
Absolute configuration: (2*S*)

$C_{11}H_{15}NO_3$

(*S*)-2′,6′-dimethyltyrosine

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



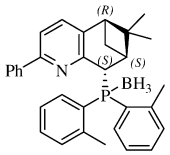
Ee = 100%
$[\alpha]_D^{20} = +118$ (c 0.72, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{30}H_{31}BNP$

(5*R*,7*S*,8*S*)-6,6-Dimethyl-8-diphenylphosphinoborane-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



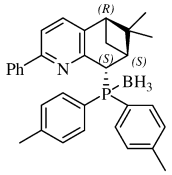
Ee = 100%
$[\alpha]_D^{20} = -19.1$ (c 1.2, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{32}H_{35}BNP$

(5*R*,7*S*,8*S*)-6,6-Dimethyl-8-di-*o*-tolylphosphinoborane-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



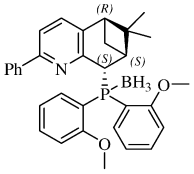
Ee = 100%
$[\alpha]_D^{20} = +58.9$ (*c* 0.56, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{32}H_{35}BNP$

(5*R*,7*S*,8*S*)-6,6-Dimethyl-8-di-*p*-tolylphosphinoborane-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



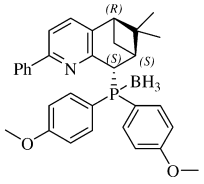
Ee = 100%
$[\alpha]_D^{20} = -23.8$ (*c* 0.55, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{32}H_{35}BNO_2P$

(5*R*,7*S*,8*S*)-8-Bis(2-methoxyphenyl)phosphinoborane-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



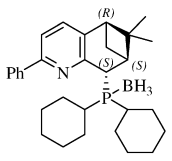
Ee = 100%
$[\alpha]_D^{20} = +72$ (*c* 0.72, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{32}H_{35}BNO_2P$

(5*R*,7*S*,8*S*)-8-Bis(4-methoxyphenyl)phosphinoborane-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



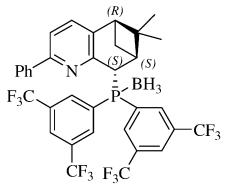
Ee = 100%
$[\alpha]_D^{20} = +17.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{30}H_{43}BNP$

(5*R*,7*S*,8*S*)-8-Dicyclohexylphosphinoborane-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



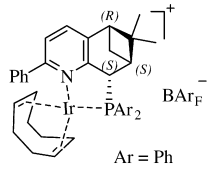
Ee = 100%
$[\alpha]_D^{20} = -61.3$ (*c* 0.72, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{34}H_{27}BF_{12}NP$

(5*R*,7*S*,8*S*)-8-Bis(3,5-bistrifluoromethylphenyl)phosphinoborane-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



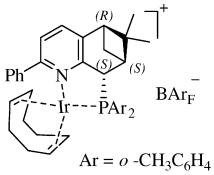
Ee = 100%
$[\alpha]_D^{20} = +100.8$ (*c* 1.05, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{70}H_{52}BF_{24}IrNP$

(η^4-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-6,6-dimethyl-8-diphenylphosphine-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



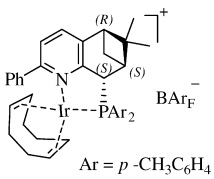
Ee = 100%
$[\alpha]_D^{20} = +148.9$ (*c* 0.68, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{72}H_{56}BF_{24}IrNP$

(η^4-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-6,6-dimethyl-8-di-*o*-tolylphosphine-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



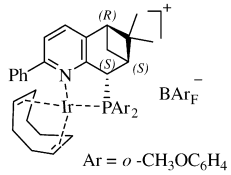
Ee = 100%
$[\alpha]_D^{20} = +102.3$ (*c* 0.9, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{72}H_{56}BF_{24}IrNP$

(η^4-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-6,6-dimethyl-8-di-*p*-tolylphosphine-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



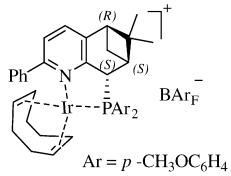
Ee = 100%
$[\alpha]_D^{20} = 63.0$ (*c* 0.9, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{72}H_{56}BF_{24}IrNP$

(η⁴-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-8-bis(2-methoxyphenyl)phosphine-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



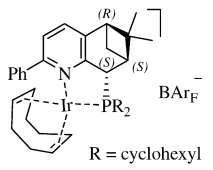
Ee = 100%
$[\alpha]_D^{20} = +94.7$ (*c* 0.35, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{72}H_{56}BF_{24}IrNO_2P$

(η⁴-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-8-bis(4-methoxyphenyl)phosphine-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



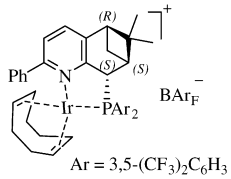
Ee = 100%
$[\alpha]_D^{20} = -27.3$ (*c* 1.36, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

$C_{70}H_{64}BF_{24}IrNP$

(η⁴-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-8-dicyclohexylphosphine-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Xiangyan Meng, Xinsheng Li *, Dongcheng Xu

Tetrahedron: Asymmetry *20 (2009) 1402*



Ee = 100%
$[\alpha]_D^{20} = -34.1$ (*c* 0.4, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (5*R*,7*S*,8*S*)

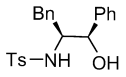
$C_{74}H_{48}BF_{36}IrNP$

(η⁴-1,5-Cyclooctadiene)[(5*R*,7*S*,8*S*)-8-bis(3,5-bis(trifluoromethyl)phenyl)phosphine-6,6-dimethyl-5,6,7,8-tetrahydro-2-phenyl-5,7-methanoquinoline] iridium(I) tetrakis[3,5-bis(trifluoromethyl)phenyl]borate

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 100%
$[\alpha]_D^{25} = -21.2$ (*c* 0.5, CH_2Cl_2)
Source of chirality: L-phenylalanine
Absolute configuration: (1*R*,2*S*)



$C_{22}H_{23}NO_3S$
(1*R*,2*S*)-2-(*p*-Tolylsulfonylamino)-1,3-diphenyl-1-propanol

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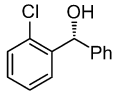
Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 93%
$[\alpha]_D^{25} = +33.3$ (*c* 0.3, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

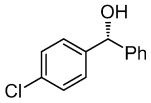


$C_{13}H_{11}ClO$
(*R*)-(2-Chloro-phenyl)-phenyl-methanol

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 90%
$[\alpha]_D^{25} = -14.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

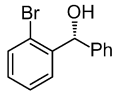


$C_{13}H_{11}ClO$
(*R*)-(4-Chloro-phenyl)-phenyl-methanol

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*

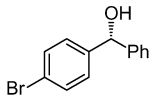
Ee = 93%
$[\alpha]_D^{25} = +36.7$ (*c* 0.6, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)



$C_{13}H_{11}BrO$
(*R*)-(2-Bromo-phenyl)-phenyl-methanol

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



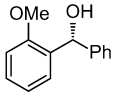
$C_{13}H_{11}BrO$

(*R*)-(4-Bromo-phenyl)-phenyl-methanol

Ee = 90%
$[\alpha]_D^{25} = -18.6$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



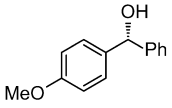
$C_{14}H_{14}O_2$

(*R*)-(2-Methoxy-phenyl)-phenyl-methanol

Ee = 94%
$[\alpha]_D^{25} = +30.7$ (*c* 0.9, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



$C_{14}H_{14}O_2$

(*R*)-(4-Methoxy-phenyl)-phenyl-methanol

Ee = 90%
$[\alpha]_D^{25} = +17.9$ (*c* 1.9, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

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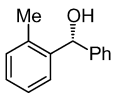
Tetrahedron: Asymmetry *20 (2009) 1407*



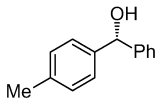
$C_{14}H_{14}O$

(*R*)-(2-Methyl-phenyl)-phenyl-methanol

Ee = 91%
$[\alpha]_D^{25} = -29.3$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



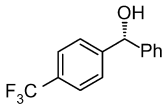
$C_{14}H_{14}O$

(*R*)-(4-Methyl-phenyl)-phenyl-methanol

Ee = 92%
$[\alpha]_D^{25} = +16.7$ (*c* 0.54, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



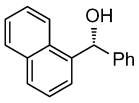
$C_{14}H_{11}F_3O$

(*R*)-Phenyl-(4-trifluoromethyl-phenyl)-methanol

Ee = 90%
$[\alpha]_D^{25} = -33.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*



$C_{17}H_{14}O$

(*R*)-Naphthalen-1-yl-phenyl-methanol

Ee = 91%
$[\alpha]_D^{25} = +48.3$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

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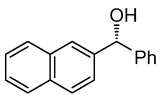
Tetrahedron: Asymmetry *20 (2009) 1407*



$C_{17}H_{14}O$

(*R*)-Naphthalen-2-yl-phenyl-methanol

Ee = 92%
$[\alpha]_D^{25} = -4.7$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

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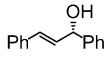
Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 87%
$[\alpha]_D^{25} = -10.5$ (*c* 1.3, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)



$C_{15}H_{14}O$
(*S*)-(*E*)-1,3-Diphenyl-prop-2-en-1-ol

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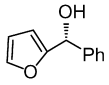
Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 90%
$[\alpha]_D^{25} = +5.3$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)



$C_{11}H_{10}O_2$
(*R*)-Furan-2-yl-phenyl-methanol

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Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 74%
$[\alpha]_D^{25} = -12.9$ (*c* 0.8, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{11}H_{16}O$
(*S*)-2,2-Dimethyl-1-phenyl-propan-1-ol

Shuangliu Zhou, Da-Wei Chuang, Shih-Ju Chang, Han-Mou Gau *

Tetrahedron: Asymmetry *20 (2009) 1407*

Ee = 77%
$[\alpha]_D^{25} = -24.6$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{10}H_{14}O$
(*S*)-2-Methyl-1-phenyl-propan-1-ol

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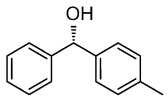
Tetrahedron: Asymmetry *20 (2009) 1407*



$C_{14}H_{14}O$

(*S*)-(4-Methyl-phenyl)-phenyl-methanol

Ee = 91%
$[\alpha]_D^{25} = -12.2$ (*c* 0.3, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

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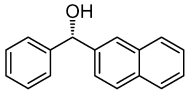
Tetrahedron: Asymmetry *20 (2009) 1407*



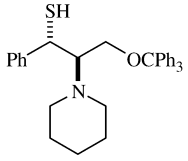
$C_{17}H_{14}O$

(*S*)-Naphthalen-2-yl-phenyl-methanol

Ee = 86%
$[\alpha]_D^{25} = +8.7$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Sílvia Subirats, Ciril Jimeno, Miquel A. Pericàs *

Tetrahedron: Asymmetry *20 (2009) 1413*



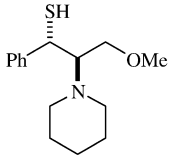
$C_{33}H_{35}NOS$

(1*S*,2*R*)-1-Phenyl-2-(piperidin-yl)-3(trityloxy)propane-1-thiol

Ee = 100%
$[\alpha]_D^{20} = +52.7$ (*c* 2.1, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

Sílvia Subirats, Ciril Jimeno, Miquel A. Pericàs *

Tetrahedron: Asymmetry *20 (2009) 1413*



$C_{15}H_{23}NOS$

(1*S*,2*R*)-3-Methoxy-1-phenyl-2-(piperidin-1-yl)propane-1-thiol

Ee = 100%
$[\alpha]_D^{20} = +179.7$ (*c* 0.27, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

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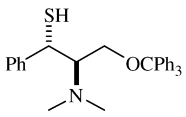
Tetrahedron: Asymmetry *20 (2009) 1413*



$C_{30}H_{31}NOS$

(1*S*,2*R*)-2-(Dimethylamino)-1-phenyl-3-(trityloxy)propane-1-thiol

Ee = 100%
$[\alpha]_D^{20} = +35.8$ (*c* 0.45, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

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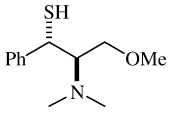
Tetrahedron: Asymmetry *20 (2009) 1413*



$C_{12}H_{19}NOS$

(1*S*,2*R*)-2-(Dimethylamino)-3-methoxy-1-phenylpropane-1-thiol

Ee = 100%
$[\alpha]_D^{20} = +97.7$ (*c* 3.4, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

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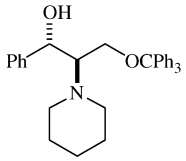
Tetrahedron: Asymmetry *20 (2009) 1413*



$C_{33}H_{35}NO_2$

(1*S*,2*R*)-1-Phenyl-2-(piperidin-1-yl)-3-(trityloxy)propan-1-ol

Ee = 100%
$[\alpha]_D^{20} = +3.1$ (*c* 0.84, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

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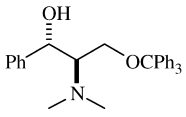
Tetrahedron: Asymmetry *20 (2009) 1413*



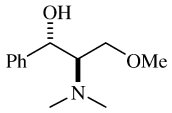
$C_{30}H_{31}NO_2$

(1*S*,2*R*)-2-(Dimethylamino)-1-phenyl-3-(trityloxy)propan-1-ol

Ee = 100%
$[\alpha]_D^{20} = +35.8$ (*c* 0.45, CHCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

Sílvia Subirats, Ciril Jimeno, Miquel A. Pericàs *

Tetrahedron: Asymmetry *20 (2009) 1413*



$C_{12}H_{19}NO_2$

(1*S*,2*R*)-2-(Dimethylamino)-3-methoxy-1-phenylpropan-1-ol

Ee = 100%
$[\alpha]_D^{20} = +16.7$ (*c* 0.55, CDCl3)
Source of chirality: (*S*,*S*)-phenylglycidol
Absolute configuration: (1*S*,2*R*)

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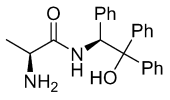
Tetrahedron: Asymmetry *20 (2009) 1419*



$C_{23}H_{24}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(2-hydroxy-1,2,2-triphenylethyl)propanamide

$[\alpha]_D^{20} = -190$ (*c* 1.0, DMSO)
Source of chirality: (*S*)-Ala and (*S*)-phenylglycine
Absolute configuration: (*S*,*S*)

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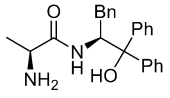
Tetrahedron: Asymmetry *20 (2009) 1419*



$C_{24}H_{26}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(1-hydroxy-1,1,3-triphenylpropan-2-yl)propanamide

$[\alpha]_D^{20} = -18$ (*c* 1.0, DMSO)
Source of chirality: (*S*)-Ala and (*S*)-Phe
Absolute configuration: (*S*,*S*)

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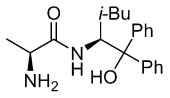
Tetrahedron: Asymmetry *20 (2009) 1419*



$C_{21}H_{28}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(1-hydroxy-4-methyl-1,1-diphenylpentan-2-yl)propanamide

$[\alpha]_D^{20} = -54$ (*c* 1.0, DMSO)
Source of chirality: (*S*)-Ala and (*S*)-Leu
Absolute configuration: (*S*,*S*)

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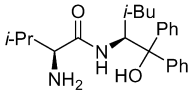
Tetrahedron: Asymmetry *20 (2009) 1419*



$[\alpha]_D^{20} = -49$ (*c* 1.0, DMSO)
Absolute configuration: (*S*, *S*)
Source of chirality: (*S*)-Val and (*S*)-Leu

$C_{23}H_{32}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(1-hydroxy-4-methyl-1,1-diphenylpentan-2-yl)-3-methylbutanamide

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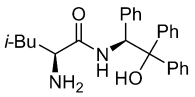
Tetrahedron: Asymmetry *20 (2009) 1419*



$[\alpha]_D^{20} = -155$ (*c* 1.0, DMSO)
Source of chirality: (*S*)-Leu and (*S*)-phenylglycine
Absolute configuration: (*S*, *S*)

$C_{26}H_{30}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(2-hydroxy-1,2,2-triphenylethyl)-4-methylpentanamide

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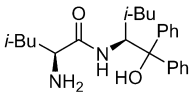
Tetrahedron: Asymmetry *20 (2009) 1419*



$[\alpha]_D^{20} = -44$ (*c* 1.0, DMSO)
Source of chirality: (*S*)-Leu and (*S*)-Leu
Absolute configuration: (*S*, *S*)

$C_{24}H_{34}N_2O_2$

(*S*,*S*)-2-Amino-*N*-(1-hydroxy-1,1,3-triphenylpropan-2-yl)-4-methylpentanamide

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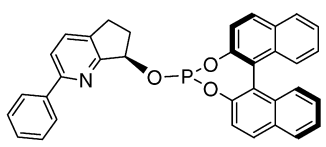
Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



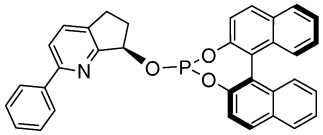
De >99%
$[\alpha]_D^{20} = +78.1$ (*c* 0.19, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,S_a)

$C_{34}H_{25}NO_3P$

(*R*)-7-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-phenyl-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine

Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



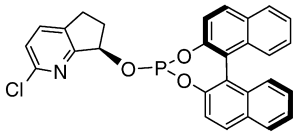
De >99%
$[\alpha]_D^{20} = -221.5$ (*c* 0.42, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,R_a)

$C_{34}H_{25}NO_3P$

(*R*)-7-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-phenyl-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine

Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



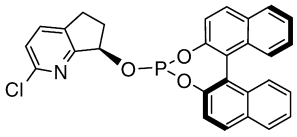
De >99%
$[\alpha]_D^{20} = +231.0$ (*c* 0.16, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,S_a)

$C_{28}H_{20}ClNO_3P$

(*R*)-7-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-chloro-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine

Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



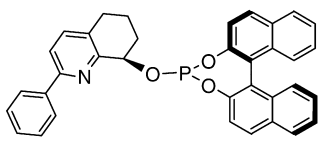
De >99%
$[\alpha]_D^{20} = -206.1$ (*c* 0.16, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,R_a)

$C_{28}H_{20}ClNO_3P$

(*R*)-7-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-chloro-6,7-dihydro-5*H*-cyclopenta[*b*]pyridine

Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



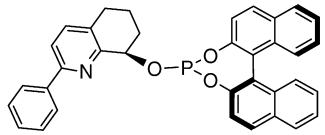
De >99%
$[\alpha]_D^{20} = +72.9$ (*c* 0.20, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,S_a)

$C_{35}H_{27}NO_3P$

(*R*)-8-*O*-((*S*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-phenyl-5,6,7,8-tetrahydroquinoine

Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



De >99%
$[\alpha]_D^{20} = -290.7$ (c 0.35, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (R_c,R_a)

$C_{35}H_{27}NO_3P$

(*R*)-8-*O*-((*R*)-2,2′-*O*,*O*-(1,1′-Binaphthyl)-dioxo-phosphite)-2-phenyl-5,6,7,8-tetrahydroquinoine

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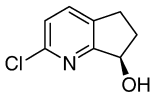
Yinjun Xie, Hanmin Huang *, Weimin Mo, Xiangqun Fan, Zhiqiang Shen, Zhenlu Shen, Nan Sun, Baoxiang Hu, Xinquan Hu *

Tetrahedron: Asymmetry *20 (2009) 1425*



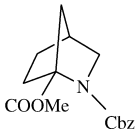
Ee >99%
$[\alpha]_D^{20} = -4.1$ (c 0.39, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: (*R*)

C_8H_8ClNO

(*R*)-2-Chloro-6,7-dihydro-5*H*-cyclopenta[*b*]pyridin-7-ol

Oleksandr O. Grygorenko *, Igor V. Komarov, Carlos Cativiela *

Tetrahedron: Asymmetry *20 (2009) 1433*



Ee = 75%
$[\alpha]_D$ = +5.0 (c 0.034, $CHCl_3$)
Source of chirality: 4-hydroxyproline
Absolute configuration: (1*R*,4*S*)

$C_{16}H_{19}NO_4$

2-Benzyl 1-methyl 2-azabicyclo[2.2.1]heptane-1,2-dicarboxylate

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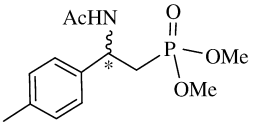
Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



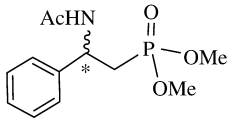
Ee >99%
$[\alpha]_D$ = +45.2 (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

$C_{13}H_{20}NO_4P$

Dimethyl 2-acetylamino-2-*p*-tolylethylphosphonate

Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



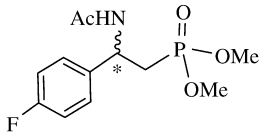
$C_{12}H_{18}NO_4P$

Dimethyl 2-acetylamino-2-phenylethylphosphonate

Ee 99%
$[\alpha]_D$ = +38.3 (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



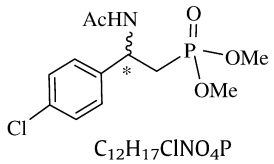
$C_{12}H_{17}FNO_4P$

Dimethyl 2-acetylamino-2-*p*-flourophenylethylphosphonate

Ee >99%
$[\alpha]_D$ = +26.4 (*c* 1.1, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



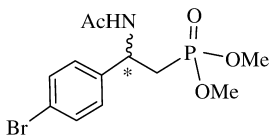
$C_{12}H_{17}ClNO_4P$

Dimethyl 2-acetylamino-2-*p*-chlorophenylethylphosphonate

Ee 99%
$[\alpha]_D$ = +23.8 (*c* 1.2, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



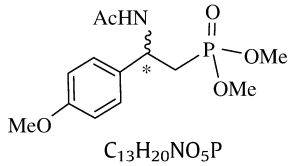
$C_{12}H_{18}NO_4PBr$

Dimethyl 2-acetylamino-2-*p*-bromophenylethylphosphonate

Ee >99%
$[\alpha]_D$ = +44.1 (*c*1.0, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

Simon Doherty *, Julian G. Knight *, Adam L. Bell, Shireen El-Menabawey, Christopher M. Vogels, Andreas Decken, Stephen A. Westcott

Tetrahedron: Asymmetry *20 (2009) 1437*



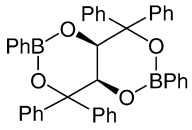
Ee >99%
$[\alpha]_D$ = +45.4 (*c* 0.65, CH_2Cl_2)
Source of chirality: asymmetric catalysis
Absolute configuration: unknown

$C_{13}H_{20}NO_5P$

Dimethyl 2-acetylamino-2-*p*-methoxyphenylethylphosphonate

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



$[\alpha]_D^{20} = -5.5$ (*c* 0.3, $CHCl_3$)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

$C_{28}H_{32}B_2O_4$

(1*R*,6*R*)-3,8,5,5,10,10-Hexaphenyl-2,4,7,9- tetraoxa-3,8-diborobicyclo[4.4.0]decane

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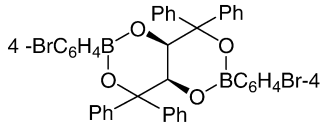
Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



$[\alpha]_D^{20} = +12.5$ (*c* 0.12, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

$C_{40}H_{30}B_2Br_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(4-bromophenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

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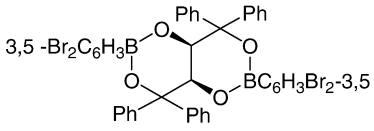
Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



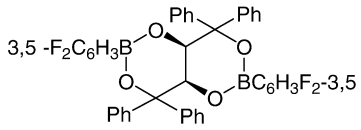
$[\alpha]_D^{20} = -20$ (*c* 0.12, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

$C_{40}H_{28}B_2Br_4O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(3,5-dibromophenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



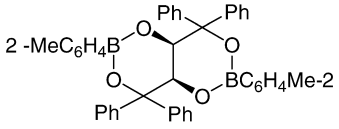
$[\alpha]_D^{20} = -18.3$ (*c* 0.24, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

$C_{40}H_{28}B_2F_4O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(3,5-difluorophenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



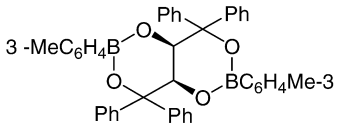
$[\alpha]_D^{20} = +34.6$ (*c* 0.13, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1R,6*R*)

$C_{42}H_{36}B_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(2-methylphenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



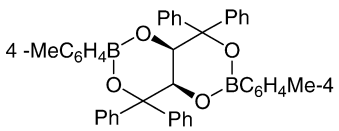
Mp 217–218 °C
$[\alpha]_D^{20} = -12.6$ (*c* 0.12, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

$C_{42}H_{36}B_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(3-methylphenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



$[\alpha]_D^{20} = +12.3$ (*c* 0.13, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

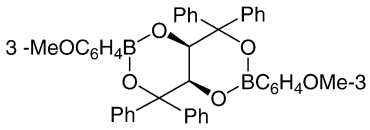
$C_{42}H_{36}B_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(4-methylphenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*

$[\alpha]_D^{20} = -17.5$ (*c* 0.16, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)



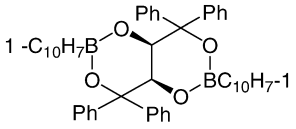
$C_{42}H_{36}B_2O_6$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(3-methoxyphenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*

$[\alpha]_D^{20} = +49.5$ (*c* 0.18, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)



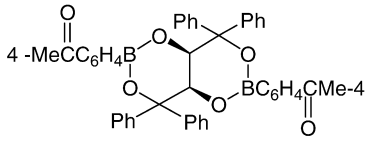
$C_{48}H_{36}B_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(1-naphthyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]-decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*

$[\alpha]_D^{20} = +12.6$ (*c* 0.12, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)



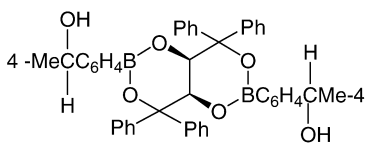
$C_{44}H_{36}B_2O_6$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(4-acetyl-phenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo-[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*

$[\alpha]_D^{20} = +9.4$ (*c* 0.5, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

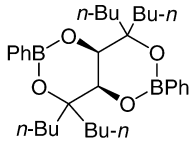


$C_{44}H_{40}B_2O_6$

(1*R*,6*R*)-5,5,10,10-Tetraphenyl-3,8-bis(4-α-hydroxyethylphenyl)-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

Zixing Shan *, Xiaoyun Hu, Yan Zhou, Xitian Peng, Jing Yi

Tetrahedron: Asymmetry *20 (2009) 1445*



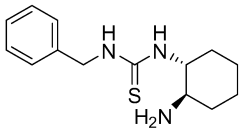
$C_{32}H_{48}B_2O_4$

(1*R*,6*R*)-5,5,10,10-Tetra(*n*-butyl)-3,8-diphenyl-2,4,7,9-tetraoxa-3,8-diborobicyclo[4.4.0]decane

$[\alpha]_D^{20} = +10.8$ (*c* 0.11, THF)
Source of chirality: (2*R*,3*R*)-tartaric acid
Absolute configuration: (1*R*,6*R*)

Xue-jing Zhang, Sheng-ping Liu, Jin-hua Lao, Guang-jian Du, Ming Yan *, Albert S. C. Chan

Tetrahedron: Asymmetry *20 (2009) 1451*



$C_{14}H_{21}N_3S$

1-[(1*R*,2*R*)-2-Aminocyclohexyl]-3-benzylthiourea

$[\alpha]_D^{24} = -16.0$ (*c* 1.0, CH_3OH)
Source of chirality: (1*R*, 2*R*)-cyclohexane-1,2-diamine
Absolute configuration: (1*R*,2*R*)

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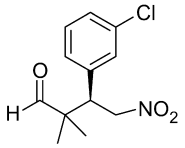

$C_{12}H_{14}O_3NCl$

(*R*)-3-(3-Chlorophenyl)-2,2-dimethyl-4-nitrobutanal

Ee = 98%
$[\alpha]_D^{24} = +10.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

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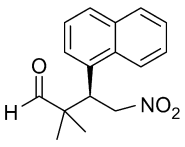

$C_{16}H_{17}O_3N$

(*R*)-2,2-Dimethyl-3-(naphthalene-1-yl)-4-nitrobutanal

Ee = 95%
$[\alpha]_D^{24} = +87.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)