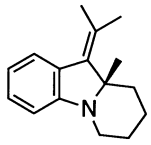
Kunio Hiroi,* Yuko Hiratsuka, Kazuhiro Watanabe, Ikuko Abe, Fumiko Kato and Mayumi Hiroi

Tetrahedron: Asymmetry *13 (2002) 1351*



$C_{16}H_{21}N$

(*S*)-8a,9-Dihydro-8a-methyl-9-*iso*-propylidenpyrido[1,2-*a*]indole

E.e. = 87%

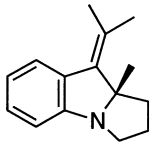
$[\alpha]_D = -38.2$ (*c* 0.72, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Kunio Hiroi,* Yuko Hiratsuka, Kazuhiro Watanabe, Ikuko Abe, Fumiko Kato and Mayumi Hiroi

Tetrahedron: Asymmetry *13 (2002) 1351*



$C_{15}H_{19}N$

(*S*)-7a,8-Dihydro-7a-methyl-8-*iso*-propylidenpyrrolido[1,2-a]indole

E.e. = 88%

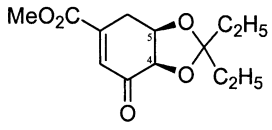
$[\alpha]_D = -45.6$ (*c* 1.12, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Gordon L. Lange,* Craig C. Humber and Jeffrey M. Manthorpe

Tetrahedron: Asymmetry *13 (2002) 1355*



$C_{13}H_{18}O_5$

Methyl (−)-(4*R*,5*R*)-*O*-isopentylidene-3-dehydro-4-*epi*-shikimate

E.e. >99%

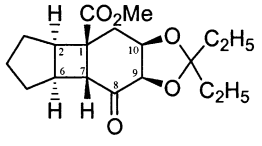
$[\alpha]_D^{25} = -28$ (*c* 0.018, CH_2Cl_2)

Source of chirality: from (−)-quinic acid

Absolute configuration: (4*R*,5*R*)

Gordon L. Lange,* Craig C. Humber and Jeffrey M. Manthorpe

Tetrahedron: Asymmetry *13 (2002) 1355*



$C_{18}H_{26}O_5$

Methyl (−)-(1*R*,2*R*,6*S*,7*R*,9*R*,10*R*)-9,10-*O*-isopentylidene-8-oxotricyclo[5.4.0.0^{2,6}]undecane-1-carboxylate

E.e. >95%

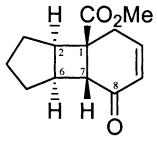
$[\alpha]_D^{25} = -67$ (*c* 0.023, CH_2Cl_2)

Source of chirality: from (−)-quinic acid

Absolute configuration: 1*R*,2*R*,6*S*,7*R*,9*R*,10*R*

Gordon L. Lange,* Craig C. Humber and Jeffrey M. Manthorpe

Tetrahedron: Asymmetry *13 (2002) 1355*

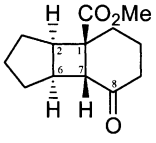


E.e. >95%
$[\alpha]_D^{25} = -8.5$ (*c* 0.55, CH_2Cl_2)
Source of chirality: from (−)-quinic acid
Absolute configuration: 1*R*,2*R*,6*S*,7*R*

$C_{13}H_{16}O_3$
Methyl (−)-(1*R*,2*R*,6*S*,7*R*)-8-oxotricyclo[5.4.0.0^{2,6}]undec-9-ene-1-carboxylate

Gordon L. Lange,* Craig C. Humber and Jeffrey M. Manthorpe

Tetrahedron: Asymmetry *13 (2002) 1355*

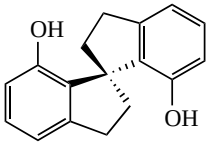


E.e. >95%
$[\alpha]_D^{25} = -76$ (*c* 0.17, $CHCl_3$)
Source of chirality: from (−)-quinic acid
Absolute configuration: 1*R*,2*R*,6*S*,7*R*

$C_{13}H_{18}O_3$
Methyl (−)-(1*R*,2*R*,6*S*,7*R*)-8-oxotricyclo[5.4.0.0^{2,6}]undecane-1-carboxylate

Ju-Hua Zhang, Jian Liao, Xin Cui, Kai-Bei Yu, Jin Zhu, Jin-Gen Deng,* Shou-Fei Zhu, Li-Xin Wang, Qi-Lin Zhou,* Lung Wa Chung and Tao Ye*

Tetrahedron: Asymmetry *13 (2002) 1363*

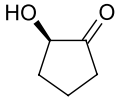


E.e. >99%
$[\alpha]_D^{20} = -38.8$ (*c* 0.6, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: *S*

$C_{17}H_{16}O_2$
(*S*)-(−)-1,1′-Spirobiindane-7,7′-diol

Srinivasan Easwar, Shrivallabh B. Desai, Narshinha P. Argade* and Krishna N. Ganesh*

Tetrahedron: Asymmetry *13 (2002) 1367*

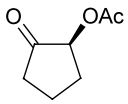


Ee = 90–92%
$[\alpha]_D^{20} = -38.4$ (*c* 1.2, $CHCl_3$)
Source of chirality: enzyme Amano PS
Absolute configuration: 2*R*

$C_5H_8O_2$
(−)-(2*R*)-Hydroxycyclopentanone

Srinivasan Easwar, Shrivallabh B. Desai, Narshinha P. Argade* and Krishna N. Ganesh*

Tetrahedron: Asymmetry *13 (2002) 1367*



$C_7H_{10}O_3$

(+)-(2*S*)-Acetoxycyclopentanone

Ee = 96–98%

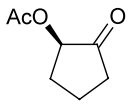
$[\alpha]_D^{20} = +61.0$ (*c* 2.0, $CHCl_3$)

Source of chirality: enzyme Amano PS

Absolute configuration: 2*S*

Srinivasan Easwar, Shrivallabh B. Desai, Narshinha P. Argade* and Krishna N. Ganesh*

Tetrahedron: Asymmetry *13 (2002) 1367*



$C_7H_{10}O_3$

(−)-(2*R*)-Acetoxycyclopentanone

Ee = 90–92%

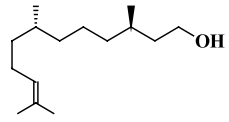
$[\alpha]_D^{20} = -54.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme Amano PS

Absolute configuration: 2*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{15}H_{30}O$

(3*R*,7*R*)-3,7,11-Trimethyl-10-dodecen-1-ol

Ee = 96%

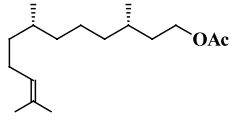
$[\alpha]_D^{22} = +4.5$ (*c* 0.9, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 3*R*,7*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{17}H_{32}O_2$

(3*S*,7*R*)-3,7,11-Trimethyl-10-dodecenyl acetate

Ee = 97%

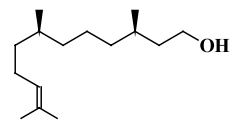
$[\alpha]_D^{22} = -5.2$ (*c* 0.88, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 3*S*,7*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{15}H_{30}O$

(3*R*,7*S*)-3,7,11-Trimethyl-10-dodecen-1-ol

Ee = 93%

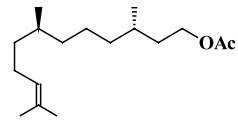
$[\alpha]_D^{22} = +3.3$ (*c* 1.12, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 3*R*,7*S*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{17}H_{32}O_2$

(3*S*,7*S*)-3,7,11-Trimethyl-10-dodecenyl acetate

Ee = 95%

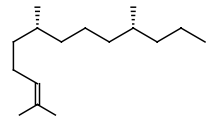
$[\alpha]_D^{22} = -5.9$ (*c* 1.22, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 3*S*,7*S*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{15}H_{30}$

(6*R*,10*R*)-2,6,10-Trimethyl-2-dodecene

Ee = 97%

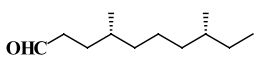
$[\alpha]_D^{22} = -6.2$ (*c* 0.84, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 6*R*,10*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{12}H_{24}O$

(4*R*,8*R*)-4,8-Dimethyldecanal

Ee = 97%

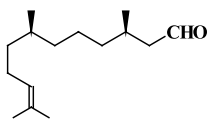
$[\alpha]_D^{22} = -7.2$ (*c* 1.4, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 4*R*,8*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{17}H_{32}O_2$

(3*R*,7*S*)-3,7,11-Trimethyl-10-dodecenal

Ee = 93%

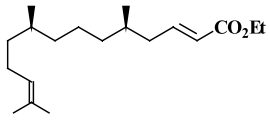
$[\alpha]_D^{22} = +3.9$ (*c* 1.4, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 3*R*,7*S*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{19}H_{34}O_2$

Ethyl (5*R*,9*S*)-5,9,13-Trimethyl-2(*E*),10-tetradecadienoate

Ee = 93%

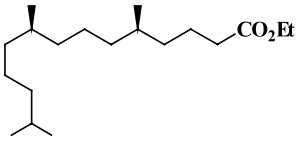
$[\alpha]_D^{22} = +5.8$ (*c* 0.68, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 5*R*,9*S*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{19}H_{38}O_2$

Ethyl (5*R*,9*R*)-5,9,13-Trimethyltetradecanoate

Ee = 93%

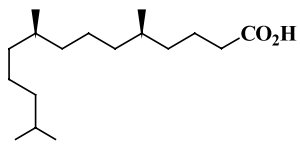
$[\alpha]_D^{22} = +4.8$ (*c* 0.8, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 5*R*,9*R*

S. Sankaranarayanan, Anubha Sharma and Subrata Chattopadhyay*

Tetrahedron: Asymmetry *13 (2002) 1373*



$C_{17}H_{34}O_2$

(5*R*,9*R*)-5,9,13-Trimethyltetradecanoic acid

Ee = 93%

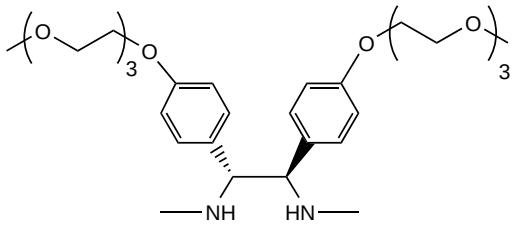
$[\alpha]_D^{22} = +3.6$ (*c* 1.26, $CHCl_3$)

Source of chirality: lipase-catalyzed acylation

Absolute configuration: 5*R*,9*R*

A. Ferrand, M. Bruno, M. L. Tommasino and M. Lemaire*

Tetrahedron: Asymmetry *13 (2002) 1379*



E.e. = 96%

$[\alpha]_D^{24} = +67$ (*c* 1, $CDCl_3$)

Source of chirality: (1*R*,2*R*)-(+)-*N*,*N*′-dimethyl-1,2-diphenyl-ethylenediamine

Absolute configuration: 1*R*,2*R*

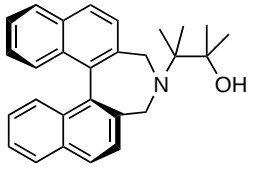
$C_{34}H_{60}N_2O_8$

(1*R*,2*R*)-(+)-*N*,*N*′-Dimethyl-1,2-(4-methoxytriethylene glycol-phenyl)ethanediamine

---

Stefano Superchi, Egidio Giorgio, Patrizia Scafato and Carlo Rosini*

Tetrahedron: Asymmetry *13 (2002) 1385*



E.e. >99%

$[\alpha]_D^{21} = +245$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-(−)-1,1′-bi-2-naphthol

Absolute configuration: *S*

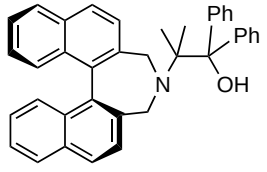
$C_{28}H_{29}NO$

(*S*)-(+)-2,2′-[2-(1,1,2,2-Tetramethyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1′-binaphthalene

---

Stefano Superchi, Egidio Giorgio, Patrizia Scafato and Carlo Rosini*

Tetrahedron: Asymmetry *13 (2002) 1385*



E.e. >99%

$[\alpha]_D^{21} = +154.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-(−)-1,1′-bi-2-naphthol

Absolute configuration: *S*

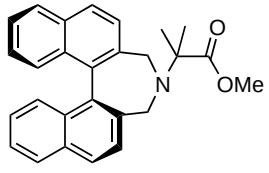
$C_{38}H_{33}NO$

(*S*)-(+)-2,2′-[2-(1,1-Dimethyl-2,2-diphenyl-2-hydroxyethyl)-2-azapropane-1,3-diyl]-1,1′-binaphthalene

---

Stefano Superchi, Egidio Giorgio, Patrizia Scafato and Carlo Rosini*

Tetrahedron: Asymmetry *13 (2002) 1385*



E.e. >99%

$[\alpha]_D^{21} = +301.5$ (*c* 1.1, $CHCl_3$)

Source of chirality: (*S*)-(−)-1,1′-bi-2-naphthol

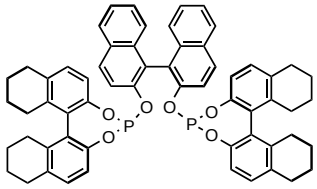
Absolute configuration: *S*

$C_{27}H_{25}NO_2$

(*S*)-(+)-2,2′-[2-(Methoxycarbonyl-(1,1-dimethyl)ethyl)-2-azapropane-1,3-diyl]-1,1′-binaphthalene

Liang Liang and Albert S. C. Chan*

Tetrahedron: Asymmetry *13 (2002) 1393*



$[\alpha]_D^{20} = +87.9$ (c 1.00, toluene)

Source of chirality: (*R*)- and (*S*)-binaphthol

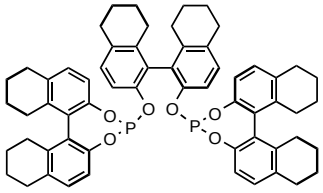
Absolute configuration: *S*,*R*,*S*

$C_{60}H_{52}O_6P_2$

[(*R*)-1,1′-Bi-2-naphthol] bi[(*S*)-2,2′-dihydroxy-5,5′,6,6′,7,7′,8,8′-octahydro-1,1′-binaphthyl] bisphosphite

Liang Liang and Albert S. C. Chan*

Tetrahedron: Asymmetry *13 (2002) 1393*



$[\alpha]_D^{20} = +91.1$ (c 1.00, toluene)

Source of chirality: (*R*)- and (*S*)-binaphthol

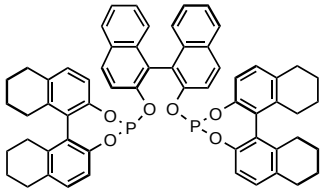
Absolute configuration: *S*,*R*,*S*

$C_{60}H_{60}O_6P_2$

[(*R*)-1,1′-Bi-2-(5,6,7,8-tertahydro)naphthol] bi[(*S*)-2,2′-dihydroxy-5,5′,6,6′,7,7′,8,8′-octahydro-1,1′-binaphthyl] bisphosphite

Liang Liang and Albert S. C. Chan*

Tetrahedron: Asymmetry *13 (2002) 1393*



$[\alpha]_D^{20} = +98.0$ (c 1.00, toluene)

Source of chirality: (*S*)-binaphthol

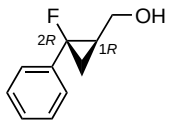
Absolute configuration: *S*,*S*,*S*

$C_{60}H_{52}O_6P_2$

[(*S*)-1,1′-Bi-2-naphthol] bi[(*S*)-2,2′-dihydroxy-5,5′,6,6′,7,7′,8,8′-octahydro-1,1′-binaphthyl] bisphosphite

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



E.e. = 98% by GC on chiral Beta-Dex™ 120 (isotherme, 140°C)

$[\alpha]_D^{25} = +51.3$ (c 1.0 in $CHCl_3$)

Source of chirality: *Amano PS*-catalyzed deracemization

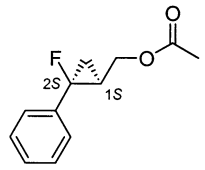
Absolute configuration: 1*R*,2*R*

$C_{10}H_{11}FO$

(1*R*,2*R*)-(2-Fluoro-2-phenylcyclopropyl)methanol

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{12}H_{13}FO_2$

(1*S*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl acetate

E.e. = 66% by GC on chiral Beta-Dex™ 120 (isotherme, 140°C) after hydrolysis with KOH/MeOH

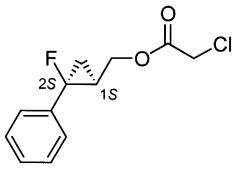
$[\alpha]_D^{25} = -36.2$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS*-catalyzed acetylation

Absolute configuration: 1*S*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{12}H_{12}ClFO_2$

(1*S*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl chloroacetate

E.e. = 47% by GC on chiral Beta-Dex™ 120 (isotherme, 140°C) after hydrolysis with KOH/MeOH

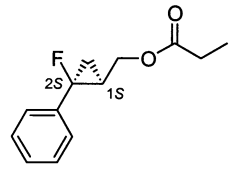
$[\alpha]_D^{25} = -22.2$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS* lipase-catalyzed acetylation

Absolute configuration: 1*S*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{13}H_{15}FO_2$

(1*S*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl propionate

E.e. = 69% by GC on chiral Beta-Dex™ 120 (isotherme, 140°C) after hydrolysis with KOH/MeOH

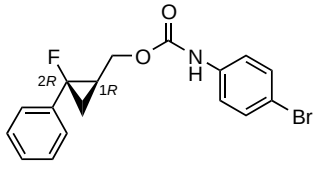
$[\alpha]_D^{25} = -35.5$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS* lipase-catalyzed propyrylation

Absolute configuration: 1*S*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{17}H_{15}BrFNO_2$

(1*R*,2*R*)-(2-Fluoro-2-phenylcyclopropyl)methyl (4-bromophenyl)carbamate

E.e. >99%

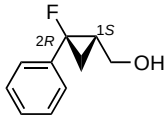
$[\alpha]_D^{25} = +17.4$ (*c* 1.0 in $CHCl_3$)

Source of chirality: synthesis from (1*R*,2*R*)-(2-fluoro-2-phenylcyclopropyl)methanol

Absolute configuration: 1*R*,2*R*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{10}H_{11}FO$

(1*S*,2*R*)-(2-Fluoro-2-phenylcyclopropyl)methanol

E.e. = 90% by GC on chiral Beta-Dex™ 120 (isotherme, 135°C)

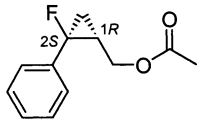
$[\alpha]_D^{25} = +20.8$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS*-catalyzed deracemization

Absolute configuration: 1*S*,2*R*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{12}H_{13}FO_2$

(1*R*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl acetate

E.e. = 99% by GC on chiral Beta-Dex™ 120 (isotherme, 135°C) after hydrolysis with KOH/MeOH

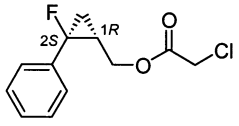
$[\alpha]_D^{25} = -19.2$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS*-catalyzed acetylation

Absolute configuration: 1*R*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{12}H_{12}ClFO_2$

(1*R*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl chloroacetate

E.e. = 80% by GC on chiral Beta-Dex™ 120 (isotherme, 135°C) after hydrolysis with KOH/MeOH

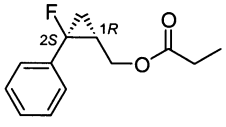
$[\alpha]_D^{25} = -17.5$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS* lipase-catalyzed acetylation

Absolute configuration: 1*R*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{13}H_{15}FO_2$

(1*R*,2*S*)-(2-Fluoro-2-phenylcyclopropyl)methyl propionate

E.e. = 97% by GC on chiral Beta-Dex™ 120 (isotherme, 135°C) after hydrolysis with KOH/MeOH

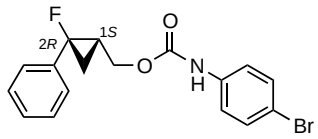
$[\alpha]_D^{25} = -22.2$ (*c* 1.0 in $CHCl_3$)

Source of chirality: *Amano PS* lipase-catalyzed propyrylation

Absolute configuration: 1*R*,2*S*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{17}H_{15}BrFNO_2$

(1*S*,2*R*)-(2-Fluoro-2-phenylcyclopropyl)methyl (4-bromophenyl)carbamate

E.e. >98%

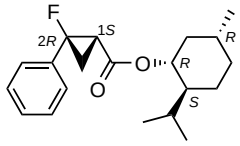
$[\alpha]_D^{25} = +40.7$ (*c* 1.0 in $CHCl_3$)

Source of chirality: synthesis from (1*S*,2*R*)-(2-fluoro-2-phenylcyclopropyl)methanol

Absolute configuration: 1*S*,2*R*

Thomas C. Rosen and Günter Haufe*

Tetrahedron: Asymmetry *13 (2002) 1397*



$C_{20}H_{27}FO_2$

(−)-Menthyl (1*S*,2*R*)-2-fluoro-2-phenylcyclopropane carboxylate

D.e. = 88% by ^{19}F NMR spectroscopy

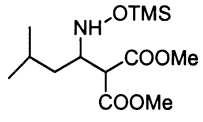
$[\alpha]_D^{25} = -25.9$ (*c* 1.0 in $CHCl_3$)

Source of chirality: synthesis from (1*S*,2*R*)-(2-fluoro-2-phenylcyclopropyl)methanol

Absolute configuration: 1*S*,2*R*

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*



$C_{13}H_{27}NO_5Si$

2-(1-Trimethylsilyloxyamino-3-methylbutyl)malonic acid dimethyl ester

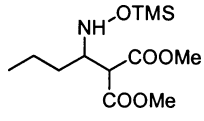
E.e. = 74%

$[\alpha]_D^{20} = -26.4$ (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*



$C_{12}H_{25}NO_5Si$

2-(1-Trimethylsilyloxyaminobutyl)malonic acid dimethyl ester

E.e. = 42%

$[\alpha]_D^{20} = -19.6$ (*c* 1.3, $CHCl_3$)

Source of chirality: asymmetric synthesis

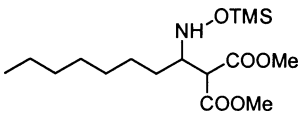
Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*

E.e. = 67%

$[\alpha]_D^{20} = -16.4$ (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis



$C_{16}H_{33}NO_5Si$

2-(1-Trimethylsilyloxyaminooctyl)malonic acid dimethyl ester

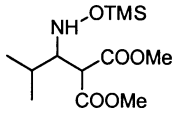
Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*

E.e. = 80%

$[\alpha]_D^{20} = -55.0$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric synthesis



$C_{12}H_{25}NO_5Si$

2-(1-Trimethylsilyloxyamino-2-methylpropyl)malonic acid dimethyl ester

---

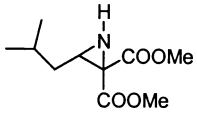
Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*

E.e. = 74%

$[\alpha]_D^{20} = -35.2$ (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis



$C_{10}H_{17}NO_4$

3-Isobutylaziridine-2,2,-dicarboxylic acid dimethyl ester

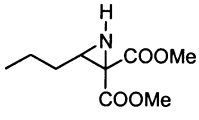
Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*

E.e. = 42%

$[\alpha]_D^{20} = -25.7$ (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

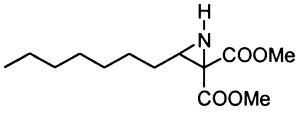


$C_9H_{15}NO_4$

3-Propylaziridine-2,2,-dicarboxylic acid dimethyl ester

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*



E.e. = 67%

$[\alpha]_D^{20} = -21.6$ (*c* 0.9, $CHCl_3$)

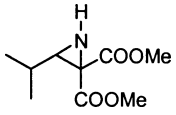
Source of chirality: asymmetric synthesis

$C_{13}H_{23}NO_4$

3-Heptylaziridine-2,2,-dicarboxylic acid dimethyl ester

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1407*



E.e. = 80%

$[\alpha]_D^{20} = -58.2$ (*c* 0.9, $CHCl_3$)

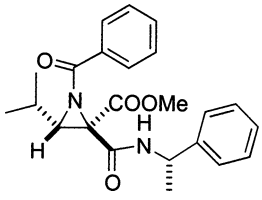
Source of chirality: asymmetric synthesis

$C_9H_{15}NO_4$

3-Isopropylaziridine-2,2,-dicarboxylic acid dimethyl ester

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante, Simona Selva and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1411*



D.e. >99%

$[\alpha]_D^{20} = -151.0$ (*c* 1.2, $CHCl_3$)

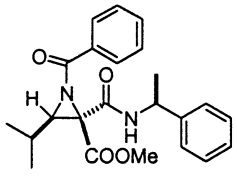
Source of chirality: asymmetric synthesis and (*S*)-(−)-α-methylbenzylamine

$C_{23}H_{26}N_2O_4$

(2*R*,3*S*,1′*S*)-*N*-Benzoyl-3-isopropyl-2-(1′-phenylethylamido)aziridine-2-carboxylic acid methyl ester

Giuliana Cardillo,* Serena Fabbroni, Luca Gentilucci, Massimo Gianotti, Rossana Perciaccante, Simona Selva and Alessandra Tolomelli

Tetrahedron: Asymmetry *13 (2002) 1411*



D.e. >84%

$[\alpha]_D^{20} = -75.0$ (*c* 0.9, $CHCl_3$)

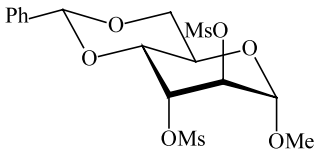
Source of chirality: asymmetric synthesis and (*S*)-(−)-α-methylbenzylamine

$C_{23}H_{26}N_2O_4$

(2*S*,3*R*,1′*S*)-*N*-Benzoyl-3-isopropyl-2-(1′-phenylethylamido)aziridine-2-carboxylic acid methyl ester

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_{16}H_{28}O_{10}S_2$

Methyl 4,6-*O*-benzylidene-2,3-di-*O*-methanesulfonyl-α-D-altropyranoside

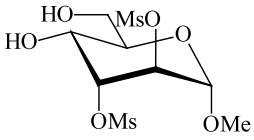
$[\alpha]_D = +44$ (*c* 1.1, chloroform)

Source of chirality: D-glucose

Absolute configuration: 1*S*,2*S*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_9H_{18}O_{10}S_2$

Methyl 2,3-di-*O*-methanesulfonyl-α-D-altropyranoside

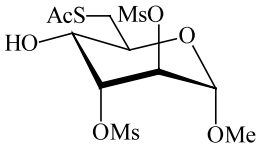
$[\alpha]_D = +50$ (*c* 1.2, acetone)

Source of chirality: D-glucose

Absolute configuration: 1*S*,2*S*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_{11}H_{20}O_{10}S_3$

Methyl 6-*S*-acetyl-2,3-di-*O*-methanesulfonyl-6-thio-α-D-altropyranoside

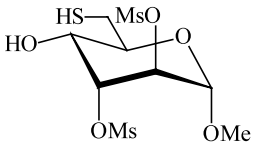
$[\alpha]_D = +32$ (*c* 1.1, chloroform)

Source of chirality: D-glucose

Absolute configuration: 1*S*,2*S*,3*R*,4*R*,5*S* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_9H_{18}O_9S_3$

Methyl 6-deoxy-2,3-di-*O*-methanesulfonyl-6-thio-α-D-altropyranoside

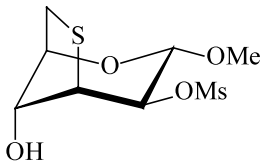
$[\alpha]_D = +142$ (*c* 0.5, ethyl acetate)

Source of chirality: D-glucose and stereo selective synthesis

Absolute configuration: 1*S*,2*S*,3*R*,4*R*,5*S* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_8H_{14}O_6S_2$

Methyl 2-*O*-methanesulfonyl-3,6-thioanhydro-α-D-mannopyranoside

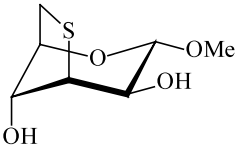
$[\alpha]_D = +113$ (*c* 0.8, chloroform)

Source of chirality: D-glucose and stereo selective synthesis

Absolute configuration: 1*S*,2*R*,3*S*,4*R*,5*S* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_7H_{13}O_4S$

Methyl 3,6-thioanhydro-α-D-mannopyranoside

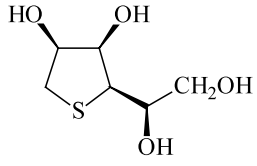
$[\alpha]_D = +66$ (*c* 0.5, chloroform)

Source of chirality: D-glucose

Absolute configuration: 1*S*,2*R*,3*S*,4*R*,5*S* (assigned by NMR spectroscopy)

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_6H_{12}O_4S$

(2*R*,3*R*,4*S*)-3,4-Dihydroxy-2-[(*R*)-1,2-dihydroxyethyl]thiolane (1,4-anhydro-4-thio-D-mannitol)

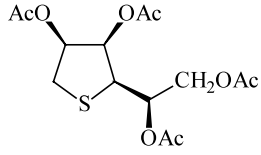
$[\alpha]_D = +64$ (*c* 1, methanol)

Source of chirality: D-glucose and stereo selective synthesis

Absolute configuration: 2*R*,3*R*,4*S*,1′*R* (assigned by NMR spectroscopy))

Isidoro Izquierdo,* María T. Plaza, Rafael Asenjo and Antonio Ramírez

Tetrahedron: Asymmetry *13 (2002) 1417*



$C_{14}H_{20}O_8S$

(2*R*,3*R*,4*S*)-3,4-Diacetoxy-2-[(*R*)-1,2-diacetoxyethyl]thiolane

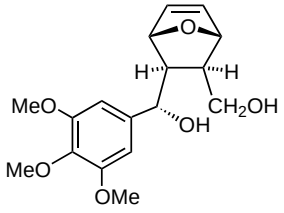
$[\alpha]_D = +81$ (*c* 1, chloroform)

Source of chirality: D-glucose

Absolute configuration: 2*R*,3*R*,4*S*,1′*R* (assigned by NMR spectroscopy)

Hongxin Shi, Huazhang Liu, Robert Bloch and Gérard Mandville*

Tetrahedron: Asymmetry *13 (2002) 1423*



$C_{17}H_{22}O_6$

E.e. = 99%

$[\alpha]_D^{20} = -32.7$ (*c* 1.0, $CHCl_3$)

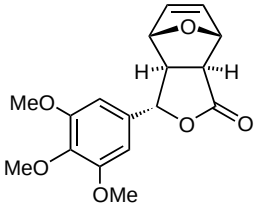
Source of chirality: from a precursor obtained by enzymatic resolution

Absolute configuration: 1*R*,2*R*,3*S*,4*S*,1′*R*

2-Hydroxymethyl-3-hydroxymethyl[1′-(3″,4″,5″)-trimethoxyphenyl]-7-oxabicyclo[2.2.1]hept-5-ene

Hongxin Shi, Huazhang Liu, Robert Bloch and Gérard Mandville*

Tetrahedron: Asymmetry *13 (2002) 1423*



$C_{17}H_{18}O_6$

E.e. = 99%

$[\alpha]_D^{20} = -95$ (*c* 1.0, $CHCl_3$)

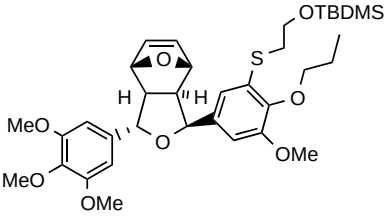
Source of chirality: from a precursor obtained by enzymatic resolution

Absolute configuration: 1*R*,2*S*,5*R*,6*R*,7*S*

5-[(3′,4′,5′)-Trimethoxyphenyl]-4,10-dioxabicyclo[5.2.1.$0^{2,6}$]dec-8-en-3-one

Hongxin Shi, Huazhang Liu, Robert Bloch and Gérard Mandville*

Tetrahedron: Asymmetry *13 (2002) 1423*



$C_{35}H_{50}O_8SSi$

E.e. = 99%

$[\alpha]_D^{20} = -53$ (*c* 0.75, $CHCl_3$)

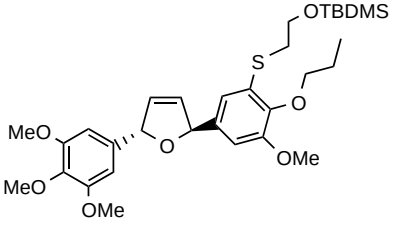
Source of chirality: from a precursor obtained by enzymatic resolution

Absolute configuration: 1*R*,2*S*,3*S*,5*S*,6*R*,7*S*

4,10-Dioxa-3-[3″-methoxy-5″-(2-*t*-butyldimethylsilyloxyethanesulfanyl)-4″-propoxy]-5-(3′,4′,5′-trimethoxyphenyl)-tricyclo[5.2.1.$0^{2,6}$]dec-8-ene

Hongxin Shi, Huazhang Liu, Robert Bloch and Gérard Mandville*

Tetrahedron: Asymmetry *13 (2002) 1423*



$C_{31}H_{46}O_7SSi$

E.e. = 99%

$[\alpha]_D^{20} = -189$ (*c* 1.07, $CHCl_3$)

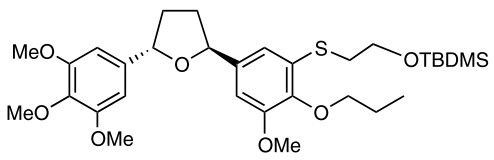
Source of chirality: from a precursor obtained by enzymatic resolution

Absolute configuration: 2*S*,5*S*

2-(3′,4′,5′-Trimethoxyphenyl)-5-[3″-methoxy-5″-(2″-*t*-butyldimethysilyloxyethanesulfanyl)-3″-propoxyphenyl]-2,5-dihydrofurane

Hongxin Shi, Huazhang Liu, Robert Bloch and Gérard Mandville*

Tetrahedron: Asymmetry *13 (2002) 1423*



$C_{31}H_{48}O_7SSi$

2-(3′,4′,5′-Trimethoxyphenyl)-5-[3″-methoxy-5″-(2″-*t*-butyldimethysilyloxyethanesulfanyl)-4″-propoxyphenyl]tetrahydrofuran

E.e. = 99%

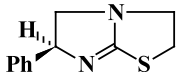
$[\alpha]_D^{20} = -51$ (*c* 1.01, $CHCl_3$)

Source of chirality: from a precursor obtained by enzymatic resolution

Absolute configuration: 2*S*,5*S*

Edit Székely,* Béla Simándi, Krisztina László, Elemér Fogassy, György Pokol and Ildikó Kmecz

Tetrahedron: Asymmetry *13 (2002) 1429*



$C_{11}H_{12}N_2S$

(*S*)-6-Phenyl-2,3,5,6-tetrahydroimidazo[2,1*b*]thiazol

Ee >99.9%

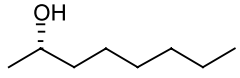
$[\alpha]_D^{20} = -107$ (*c* 5, MeOH)

Source of chirality: resolution

Absolute configuration: *S*

Mateja Pogorevc and Kurt Faber*

Tetrahedron: Asymmetry *13 (2002) 1435*



$C_8H_{18}O$

(*S*)-2-Octanol

E.e. 82%

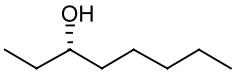
$[\alpha]_D^{20} = -7.4$ (*c* 1.6, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *S*

Mateja Pogorevc, Ulrike T. Strauss, Thomas Riermeier and Kurt Faber*

Tetrahedron: Asymmetry *13 (2002) 1443*



$C_8H_{18}O$

(*S*)-3-Octanol

E.e. 90%

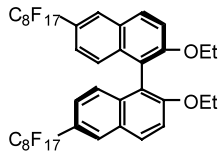
$[\alpha]_D^{20} = -9.0$ (*c* 1.6, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *S*

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*

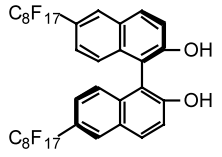


Solid; mp 54–55°C
$[\alpha]_D^{25}=+29.5$ (*c* 0.2, Et_2O)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{40}H_{20}O_2F_{34}$
(*R*)-2,2′-Diethoxy-6,6′-diperfluorooctyl-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*

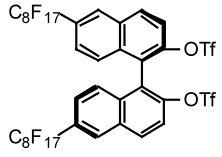


Solid; mp 124–126°C
$[\alpha]_D^{25}=-16.9$ (*c* 0.5, $CHCl_3$)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{36}H_{12}O_2F_{34}$
(*R*)-6,6′-Diperfluorooctyl-1,1′-binaphthyl-2,2′-diol

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*

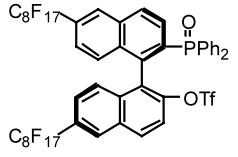


$[\alpha]_D^{25}=-51.3$ (*c* 0.3, AcOEt)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{38}H_{10}O_6F_{40}S_2$
(*R*)-2,2′-Bis(trifluoromethanesulfonyloxy)-6,6′-diperfluorooctyl-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*

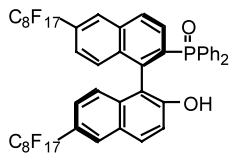


Solid; mp 71–73°C
$[\alpha]_D^{25}=+3.7$ (*c* 0.2, AcOEt)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{49}H_{20}O_4F_{37}PS$
(*R*)-6,6′-Diperfluorooctyl-2-diphenylphosphinyl-2′-(trifluoromethanesulfonyloxy)-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



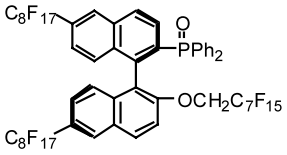
Solid; mp 102–104°C
$[\alpha]_D^{25} = -39.5$ (*c* 0.2, AcOEt)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{48}H_{21}O_2F_{34}P$

(*R*)-6,6′-Diperfluorooctyl-2-diphenylphosphinyl-2′-hydroxy-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



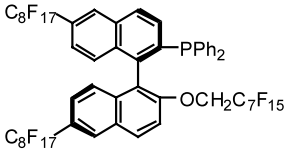
Solid; mp 54–56°C
$[\alpha]_D^{25} = +15.1$ (*c* 0.2, Et_2O)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{56}H_{22}O_2F_{49}P$

(*R*)-6,6′-Diperfluorooctyl-2-diphenylphosphinyl-2′-(1*H*,1*H*-perfluorooctyloxy)-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



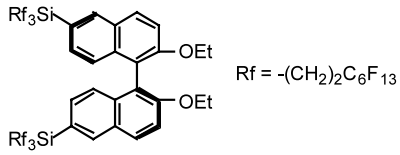
Solid; mp 39–41°C
$[\alpha]_D^{25} = +8.5$ (*c* 0.2, Et_2O)
Source of chirality: (*R*)-binaphthol
Absolute configuration: *R*

$C_{56}H_{22}OF_{49}P$

(*R*)-6,6′-Diperfluorooctyl-2-diphenylphosphino-6,6′-diperfluorooctyl-2′-(1*H*,1*H*-perfluorooctyloxy)-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



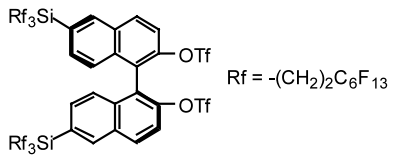
Oil
$[\alpha]_D^{25} = -17.0$ (*c* 1, $C_6H_5CF_3$)
Source of chirality: (*S*)-binaphthol
Absolute configuration: *S*

$C_{72}H_{44}O_2F_{78}Si_2$

(*S*)-6,6′-Bis[tris(1*H*,1*H*,2*H*,2*H*-perfluorooctyl)silyl]-2,2′-diethoxy-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



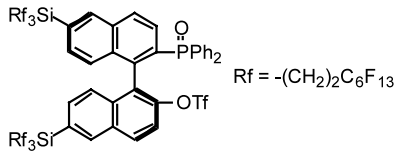
Oil
$[\alpha]_D^{25} = +29.8$ (c 0.5, Et_2O)
Source of chirality: (*S*)-binaphthol
Absolute configuration: *S*

$C_{70}H_{34}O_6F_8Si_2S_2$

(*S*)-2,2′-Bis(trifluoromethanesulfonyloxy)-6,6′-bis[tris(1*H*,1H,2*H*,2*H*-perfluorooctyl)silyl]-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



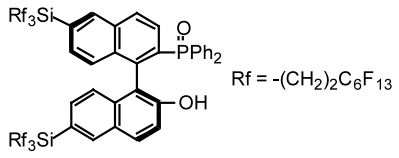
Oil
$[\alpha]_D^{25} = +3.5$ (c 0.3, Et_2O)
Source of chirality: (*S*)-binaphthol
Absolute configuration: *S*

$C_{81}H_{44}F_{81}O_4PSSi_2$

(*S*)-6,6′-Bis[tris(1*H*,1H,2*H*,2*H*-perfluorooctyl)silyl]-2-diphenylphosphinyl-2′-(trifluoromethanesulfonyloxy)-1,1′–binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



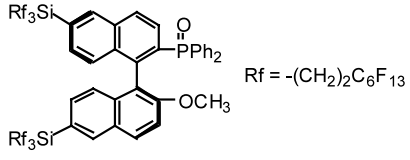
Oil
$[\alpha]_D^{25} = +36.5$ (c 0.2, Et_2O)
Source of chirality: (*S*)-binaphthol
Absolute configuration: *S*

$C_{80}H_{45}O_2F_{78}PSi_2$

(*S*)-6,6′-Bis[tris(tris(1*H*,1*H*,2*H*,2*H*-perfluorooctyl)silyl]-2-diphenylphosphinyl-2′-hydroxy-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



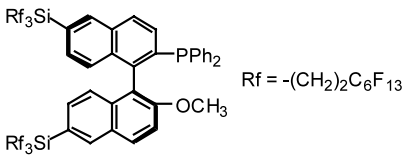
Oil
$[\alpha]_D^{25} = -3.1$ (c 0.3, Et_2O)
Source of chirality: (*S*)-binaphthol
Absolute configuration: *S*

$C_{81}H_{47}O_2F_{78}PSi_2$

(*S*)-6,6′-Bis[tris(tris(1*H*,1*H*,2*H*,2*H*-perfluorooctyl)silyl]-2-diphenylphosphinyl-2′-methoxy-1,1′-binaphthyl

David Maillard, Jerôme Bayardon, Joju Davis Kurichiparambil, Christelle Nguefack-Fournier and Denis Sinou*

Tetrahedron: Asymmetry *13 (2002) 1449*



Oil

$[\alpha]_D^{25} = +8.0$ (c 0.1, Et_2O)

Source of chirality: (*S*)-binaphthol

Absolute configuration: *S*

$C_{81}H_{47}OF_{78}PSi_2$

(*S*)-6,6′-Bis[tris(1*H*,1*H*,2*H*,2*H*-perfluorooctyl)silyl]-2-diphenylphosphino-2′-methoxy-1,1′-binaphthyl