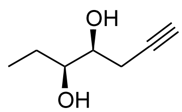
Tonino Caruso and Aldo Spinella*

Tetrahedron: Asymmetry *13 (2002) 2071*

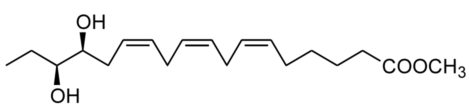


$C_7H_{12}O_2$
(4*S*,5*S*)-4,5-Dihydroxyhept-1-yne

$[\alpha]_D^{15} = -1.3$ ($c = 5.2$, $CHCl_3$)
Source of chirality: Sharpless' asymmetric dihydroxylation
Absolute configuration: 4*S*,5*S*

Tonino Caruso and Aldo Spinella*

Tetrahedron: Asymmetry *13 (2002) 2071*

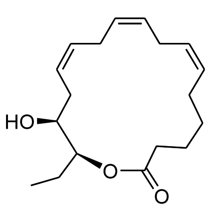


$C_{19}H_{32}O_4$
Methyl (15*S*,16*S*)-15,16-dihydroxyoctadecyl-(6*Z*,9*Z*,12*Z*)-trienoate

$[\alpha]_D^{15} = -6.9$ ($c = 2.4$, CH_3OH)
Source of chirality: Sharpless' asymmetric dihydroxylation
Absolute configuration: 15*S*,16*S*

Tonino Caruso and Aldo Spinella*

Tetrahedron: Asymmetry *13 (2002) 2071*

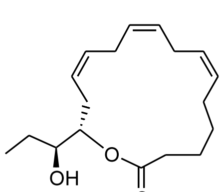


$C_{18}H_{28}O_3$
Aplyolide C

$[\alpha]_D^{15} = -22.8$ (c 0.7, $CHCl_3$)
Source of chirality: Sharpless' asymmetric dihydroxylation
Absolute configuration: 15*S*,16*S*

Tonino Caruso and Aldo Spinella*

Tetrahedron: Asymmetry *13 (2002) 2071*

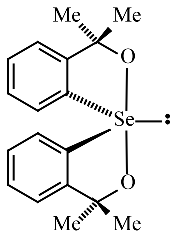


$C_{18}H_{28}O_3$
Aplyolide E

$[\alpha]_D^{15} = +39.4$ (c 0.3, $CHCl_3$)
Source of chirality: Sharpless' asymmetric dihydroxylation
Absolute configuration: 15*S*,16*S*

Józef Drabowicz,* Jerzy Łuczak, Marian Mikołajczyk, Yohsuke Yamamoto, Shiro Matsukawa and Kin-ya Akiba

Tetrahedron: Asymmetry *13 (2002) 2079*



$C_{18}H_{28}O_4Se$

3,3,3′,3′-Tetramethyl-1,1′-spirobi[3*H*,2,1]-benzoxaselenole

$[\alpha]_{589} = -20$ (*c* 0.36, CH_2Cl_2)
Source of chirality: chromatography of the racemate on a chiral HPLC column

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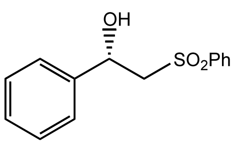
Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



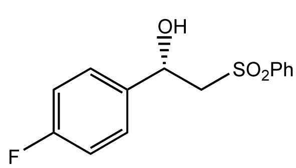
$C_{14}H_{14}O_3S$

(*S*)-1-Phenyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 94%
$[\alpha]_D^{20} = +31.8$ (*c* 2.15, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



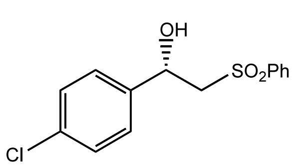
$C_{14}H_{13}FO_3S$

(*S*)-1-*p*-Fluorophenyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 97%
$[\alpha]_D^{20} = +29.7$ (*c* 2.15, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



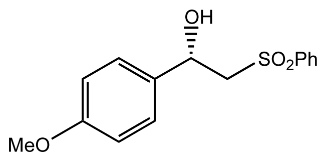
$C_{14}H_{13}ClO_3S$

(*S*)-1-*p*-Chlorophenyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 94%
$[\alpha]_D^{20} = +28.9$ (*c* 1.15, $CHCl_3$)
Source of chirality: asymmetric reduction
Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{15}H_{16}O_4S$

(*S*)-1-*p*-Methoxylphenyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 94%

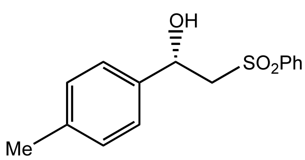
$[\alpha]_D^{20}$ = +31.8 (*c* 2.15, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{15}H_{16}O_3S$

(*S*)-1-*p*-Tolyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 94%

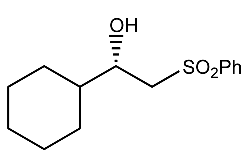
$[\alpha]_D^{20}$ = +28.4 (*c* 1.69, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{14}H_{20}O_3S$

(*S*)-1-Cyclohexyl-2-(phenylsulfonyl)ethan-1-ol

E.e = 87%

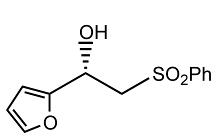
$[\alpha]_D^{20}$ = +23.7 (*c* 1.19, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{12}H_{12}O_4S$

(*S*)-1-Furan-2-(phenylsulfonyl)ethan-1-ol

E.e = 93%

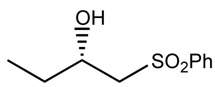
$[\alpha]_D^{20}$ = +12.7 (*c* 1.57, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{10}H_{14}O_3S$

(*S*)-1-(Phenylsulfonyl)butan-2-ol

E.e = 56%

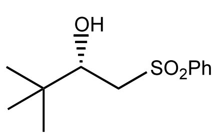
$[\alpha]_D^{20}$ = +17.9 (*c* 1.24, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Gang Zhao,* Jian-bing Hu, Zhan-shan Qian and Wei-xing Yin

Tetrahedron: Asymmetry *13 (2002) 2095*



$C_{12}H_{18}O_3S$

(*S*)-1-(Phenylsulfonyl)-3,3-dimethylbutan-2-ol

E.e = 97%

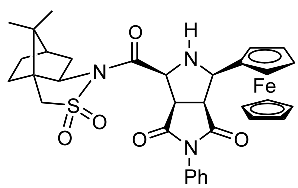
$[\alpha]_D^{20}$ = +43.6 (*c* 3.13, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: *S*

Özdemir Dogan,* Imdat Öner, Dinçer Ülkü and Cengiz Arici

Tetrahedron: Asymmetry *13 (2002) 2099*



$C_{33}H_{35}FeN_3O_5S$

[1*S*-[(1*S**,3*R**,3a*S**,6a*R**),3aα,6α,7aβ]]-3*H*-3a,6-Methano-2,1-benzisothiazole, hexahydro-8,8-dimethyl-1-[(hexahydro-4,6-diaxo-3-ferrocenyl-5-phenylpyrrolo[3,4-*c*]pyrrol-1-yl)carbonyl]-2,2-(S_S)-dioxide

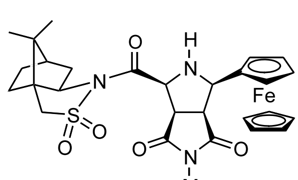
$[\alpha]_D^{29}$ = −28.7 (*c* 0.67, CH_2Cl_2)

Source of chirality: (1*S*)-(−)-2,10-camphorsultam

Absolute configuration: 1*S**,3*R**,3a*S**,6a*R**

Özdemir Dogan,* Imdat Öner, Dinçer Ülkü and Cengiz Arici

Tetrahedron: Asymmetry *13 (2002) 2099*



$C_{28}H_{33}FeN_3O_5S$

[1*S*-[(1*S**,3*R**,3a*S**,6a*R**),3aα,6α,7aβ]]-3H-3a,6-Methano-2,1-benzisothiazole, hexahydro-8,8-dimethyl-1-[(hexahydro-4,6-diaxo-3-ferrocenyl-5-methylpyrrolo[3,4-*c*]pyrrol-1-yl)carbonyl]-2,2-(S_S)-dioxide

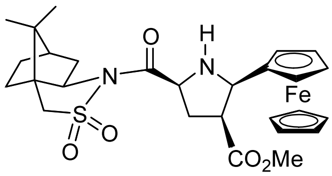
$[\alpha]_D^{29}$ = −18.7 (*c* 0.67, CH_2Cl_2)

Source of chirality: (1*S*)-(−)-2,10-camphorsultam

Absolute configuration: 1*S**,3*R**,3a*S**,6a*R**

Özdemir Dogan,* Imdat Öner, Dinçer Ülkü and Cengiz Arici

Tetrahedron: Asymmetry *13 (2002) 2099*



$[\alpha]_D^{29}=+7.8$ (*c* 0.67, CH_2Cl_2)

Source of chirality: (1*S*)-(−)-2,10-camphorsultam

Absolute configuration: 2*R**,3*S**,5*S**

$C_{27}H_{34}FeN_2O_5S$

[3a*S*-[(2*R**,3*S**,5*S**),3aα,6α,7aβ]]-3-Pyrrolidinecarboxylic acid, 2-ferrocenyl-5-[(tetrahydro-8,8-dimethyl-3*H*-3a,6-methano-2,1-benzisothiazol-1(4*H*)carbonyl]methyl ester (S_S)-dioxide

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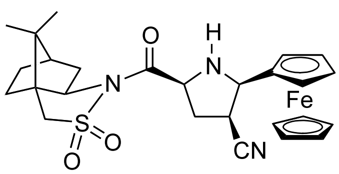
Özdemir Dogan,* Imdat Öner, Dinçer Ülkü and Cengiz Arici

Tetrahedron: Asymmetry *13 (2002) 2099*



$[\alpha]_D^{29}=-23.8$ (*c* 0.67, CH_2Cl_2)

Source of chirality: (1*S*)-(−)-2,10-camphorsultam

Absolute configuration: 2*R**,3*S**,5*S**

$C_{26}H_{31}FeN_3O_3S$

[3aS-[2*R**,3*S**,5*S**),3aα,6α,7aβ]]-5-[(Tetrahydro-8,8-dimethyl-3*H*-3a,6-methano-2,1-benzisothiazol-1(4*H*)carbonyl]-2-ferrocenylpyrrolidine-3-carbonitrile (S_S)-dioxide

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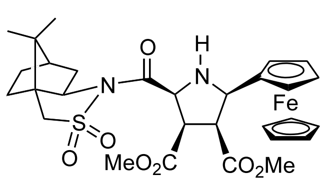
Özdemir Dogan,* Imdat Öner, Dinçer Ülkü and Cengiz Arici

Tetrahedron: Asymmetry *13 (2002) 2099*



$[\alpha]_D^{29}=-3.4$ (*c* 0.67, CH_2Cl_2)

Source of chirality: (1*S*)-(−)-2,10-camphorsultam

Absolute configuration: 2*S**,3*R**,4*S**,5*R**

$C_{29}H_{36}FeN_2O_7S$

[2*S*-[(2*S**,3*R**,4*S**,5*R**)]]-3,4-Pyrrolidine carboxylic acid, 2-ferrocenyl-5-[(tetrahydro-8,8-dimethyl-3*H*-3a,6-methano-2,1-benzisothiazol-1(4*H*)-yl)carbonyl]dimethyl ester (S_S)-dioxide

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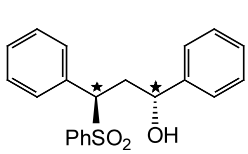
Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



Ee >95%

De = 100% (determined by ^{1}H NMR)

$[\alpha]_D$ +59 (0.96, CH_2Cl_2)

Source of chirality: diastereoselective reduction of (*R*)-1,3-diphenyl-3-phenylsulfonylpropan-1-one and recrystallization

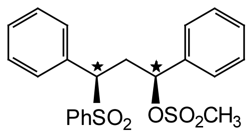
Absolute configuration: 1*R*,3*R* (determined by chemical correlation)

$C_{21}H_{20}O_3S$

(+)-(1*R*,3*R*)-1,3-Diphenyl-3-phenylsulfonylpropan-1-ol

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{22}H_{22}O_5S_2$

(+)-(1*S*,3*R*)-(1,3-Diphenyl-3-phenylsulfonylpropyl) methanesulfonate

Ee >95%

De = 100% (determined by ^{1}H NMR)

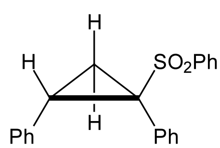
$[\alpha]_D$ +50 (0.51, CH_2Cl_2)

Source of chirality: esterification of (1*S*,3*R*)-1,3-diphenyl-3-phenylsulfonylpropan-1-ol

Absolute configuration: 1*S*,3*R* (determined by chemical correlation)

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{21}H_{18}O_2S$

(−)-(1*R*,2*R*)-1,2-Diphenyl-1-phenylsulfonylcyclopropane

Ee >95%

De = 100% (determined by ^{1}H NMR)

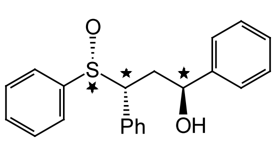
$[\alpha]_D$ −141 (0.6, CH_2Cl_2)

Source of chirality: intramolecular S_N2 reaction of (1*S*,3*R*)-(1,3-diphenyl-3-phenylsulfonylpropyl) methanesulfonate

Absolute configuration: 1*R*,2*R* (determined by chemical correlation and 2D NMR measurement)

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{21}H_{20}O_2S$

(+)-(1*S*,3*R*,*R*$_S$)-1,3-Diphenyl-3-phenylsulfinylpropan-1-ol

Ee >95%

De = 100% (determined by ^{1}H NMR)

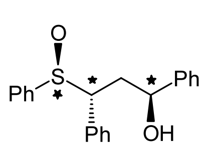
$[\alpha]_D$ +53 (0.2, CH_2Cl_2)

Source of chirality: diastereoselective sulfoxidation and recrystallization

Absolute configuration: 1*S*,3*R*,*R*$_S$ (determined by chemical correlation and CD measurement)

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{21}H_{20}O_2S$

(+)-(1*S*,3*R*,*S*$_S$)-1,3-Diphenyl-3-phenylsulfinylpropan-1-ol

Ee >95%

De = 100% (determined by ^{1}H NMR)

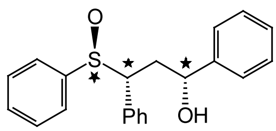
$[\alpha]_D$ +65 (0.75, CH_2Cl_2)

Source of chirality: diastereoselective sulfoxidation and recrystallization

Absolute configuration: 1*S*,3*R*,*S*$_S$ (determined by chemical correlation and CD measurement)

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{21}H_{20}O_2S$

(+)-(1*R*,3*R*,S_S)-1,3-Diphenyl-3-phenylsulfinylpropan-1-ol

Ee >95%

De = 100% (determined by [1]H NMR)

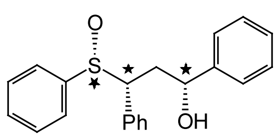
$[\alpha]_D$ +97 (0.6, CH_2Cl_2)

Source of chirality: diastereoselective sulfoxidation and recrystallization

Absolute configuration: 1*R*,3*R*,S_S (determined by chemical correlation and CD measurement)

Jacek Skarżewski,* Renata Siedlecka, Elżbieta Wojaczyńska and Mariola Zielińska-Błajet

Tetrahedron: Asymmetry *13 (2002) 2105*



$C_{21}H_{20}O_2S$

(+)-(1*R*,3*R*,R_S)-1,3-Diphenyl-3-phenylsulfinylpropan-1-ol

Ee >95%

De = 100% (determined by [1]H NMR)

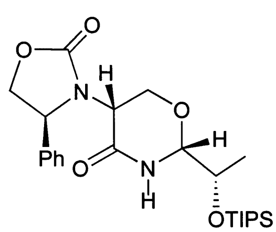
$[\alpha]_D$ +126 (0.7, CH_2Cl_2)

Source of chirality: diastereoselective sulfoxidation and recrystallization

Absolute configuration: 1*R*,3*R*,R_S (determined by chemical correlation and CD measurement)

Mauro Panunzio,* Elisa Bandini, Eileen Campana and Paola Vicennati

Tetrahedron: Asymmetry *13 (2002) 2113*



$C_{24}H_{38}N_2O_5Si$

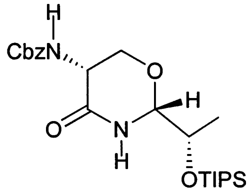
(5*R*)-[(4*S*)-(2-Oxo-4-phenyloxazolidin-3-yl)-2*R*-(1*S*-triisopropylsilanyloxyethyl)]-[1,3]oxazinan-4-one

$[\alpha]_D^{20}$ = +79.9 (*c* 1.76, $CHCl_3$)

Source of chirality: asymmetric synthesis

Mauro Panunzio,* Elisa Bandini, Eileen Campana and Paola Vicennati

Tetrahedron: Asymmetry *13 (2002) 2113*



$C_{23}H_{38}N_2O_5Si$

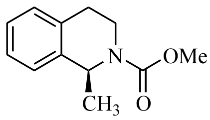
[(2*R*,5*R*)-4-Oxo-[(1*S*)-triisopropylsilanoxyethyl)-[1,3]oxazinan-5-yl]carbamic acid benzyl ester

$[\alpha]_D^{20}$ = −24.8 (*c* 0.87, $CHCl_3$)

Source of chirality: asymmetric synthesis

Alexandre Alexakis* and Franck Amiot

Tetrahedron: Asymmetry *13 (2002) 2117*



$C_{12}H_{15}NO_2$

(*S*)-1-Methyl-1,2,3,4-tetrahydro-[*N*-methoxycarbonyl]-isoquinoline

Ee = 4%

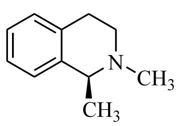
$[\alpha]_D^{20}$ = +5.9 (*c* 1.07, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Alexandre Alexakis* and Franck Amiot

Tetrahedron: Asymmetry *13 (2002) 2117*



$C_{11}H_{15}N$

(*S*)-1,2-Dimethyl-1,2,3,4-tetrahydroisoquinoline

Ee = 4%

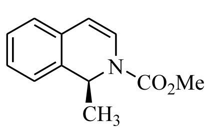
$[\alpha]_D^{20}$ = −2.1 (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Alexandre Alexakis* and Franck Amiot

Tetrahedron: Asymmetry *13 (2002) 2117*



$C_{12}H_{13}NO_2$

(*S*)-1-Methyl-1,2-dihydro-[*N*-methoxycarbonyl]-isoquinoline

Ee = 36%

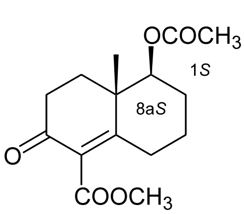
$[\alpha]_D^{20}$ = +18.5 (*c* 0.87, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{15}H_{20}O_5$

Ee >99%

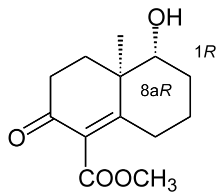
$[\alpha]_D^{32}$ = +103 (*c* 0.99, $CHCl_3$)

Source of chirality: β-amylase-catalyzed kinetic resolution

Absolute configuration: 1*S*,8a*S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{13}H_{18}O_4$

Ee = 98%

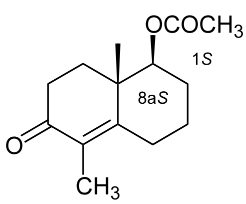
$[\alpha]_D^{32} = -139$ (*c* 1.19, $CHCl_3$)

Source of chirality: β-amylase-catalyzed kinetic resolution

Absolute configuration: 1*R*,8a*R*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{14}H_{20}O_3$

Ee >99%

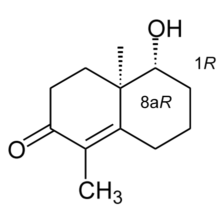
$[\alpha]_D^{28} = +95$ (*c* 1.0, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*S*,8a*S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{12}H_{18}O_2$

Ee = 92%

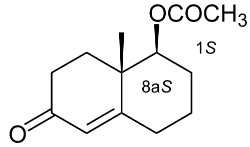
$[\alpha]_D^{28} = -147$ (*c* 1.0, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*R*,8a*R*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{13}H_{18}O_3$

Ee = 97%

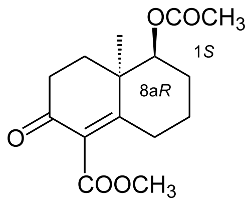
$[\alpha]_D^{28} = +102$ (*c* 1.0, $CHCl_3$)

Source of chirality: β-amylase-catalyzed kinetic resolution

Absolute configuration: 1*S*,8a*S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{15}H_{20}O_5$

Ee = 98%

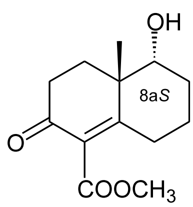
$[\alpha]_D^{30} = -100$ (*c* 0.98, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*S*,8a*R*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{13}H_{18}O_4$

Ee = 99%

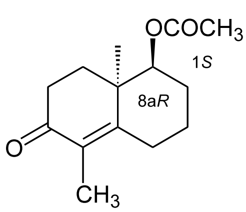
$[\alpha]_D^{30} = +84$ (*c* 1.1, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*R*,8a*S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{14}H_{20}O_3$

Ee >99%

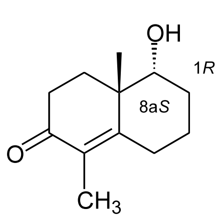
$[\alpha]_D^{30} = -79$ (*c* 1.4, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*S*,8a*R*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{12}H_{18}O_2$

Ee = 30%

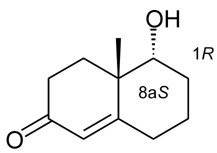
$[\alpha]_D^{30} = +39$ (*c* 1.9, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*R*,8a*S*

Nobuko Shimizu,* Hiroyuki Akita and Takeshi Kawamata

Tetrahedron: Asymmetry *13 (2002) 2123*



$C_{11}H_{16}O_2$

Ee = 93%

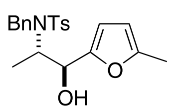
$[\alpha]_D^{27}$ = +93 (*c* 1.6, $CHCl_3$)

Source of chirality: lipase-catalyzed kinetic resolution

Absolute configuration: 1*R*,8a*S*

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{22}H_{25}NO_4S$

(1*S*,2*S*)-*N*-Benzyl-*N*-[2-(5-methylfuran)-2-yl-2-hydroxy-1-methylethyl]-4-methylbenzenesulfonamide

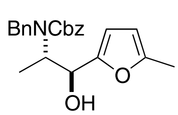
Ee = 100%

$[\alpha]_D^{20}$ = +19.6 (c 0.9, CH_2Cl_2)

Source of chirality: L-alanine

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{23}H_{25}NO_4$

(1*S*,2*S*)-*N*-Benzyl,*N*-[2-(5-methylfuran)-2-yl-2-hydroxy-1-methylethyl]carbamic acid benzyl ester

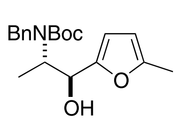
Ee = 100%

$[\alpha]_D^{20}$ = −25.0 (*c* 1.1, CH_2Cl_2)

Source of chirality: L-alanine

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{20}H_{27}NO_4$

(1*S*,2*S*)-*N*-Benzyl,*N*-[2-(5-methylfuran)-2-yl-2-hydroxy-1-methylethyl]carbamic acid *tert*-butyl ester

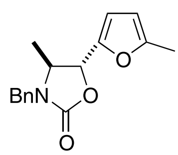
Ee = 100%

$[\alpha]_D^{20}$ = +25.3 (*c* 0.9, CH_2Cl_2)

Source of chirality: L-alanine

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{16}H_{17}NO_3$

(4*S*,5*R*)-3-Benzyl-4-methyl-(5-methylfuran-2-yl)oxazolidinon-2-one

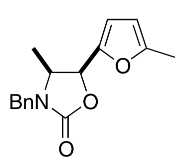
Ee = 100%

$[\alpha]_D^{20} = -144.5$ (*c* 1.3, CH_2Cl_2)

Source of chirality: L-alanine

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{16}H_{17}NO_3$

(4*S*,5*S*)-3-Benzyl-4-methyl-(5-methylfuran-2-yl)oxazolidinon-2-one

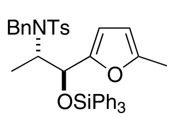
Ee = 100%

$[\alpha]_D^{20} = +40.5$ (*c* 0.5, CH_2Cl_2)

Source of chirality: L-alanine

Elżbieta Kobrzycka, Dorota Gryko and Janusz Jurczak*

Tetrahedron: Asymmetry *13 (2002) 2133*



$C_{40}H_{39}NO_4SSi$

(1*S*,2*S*)-*N*-Benzyl-*N*-[2-(5-methylfuran-2-yl)-2-triphenylsilanyloxy-1-methylethyl]-4-methylbenzenesulfonamide

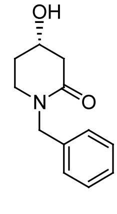
Ee = 100%

$[\alpha]_D^{20} = -39.3$ (*c* 1.1, CH_2Cl_2)

Source of chirality: L-alanine

Dongliang Chang, Hans-Jürgen Feiten, Bernard Witholt and Zhi Li*

Tetrahedron: Asymmetry *13 (2002) 2141*



$C_{12}H_{15}NO_2$

(*S*)-*N*-Benzyl-4-hydroxypiperidin-2-one

Ee = 31%

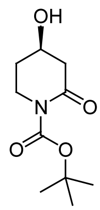
$[\alpha]_D^{25} = -6.5$ (*c* 1.10, $CHCl_3$)

Source of chirality: regio- and stereoselective biohydroxylation

Absolute configuration: *S*

Dongliang Chang, Hans-Jürgen Feiten, Bernard Witholt and Zhi Li*

Tetrahedron: Asymmetry *13 (2002) 2141*



$C_{10}H_{17}NO_4$

(*R*)-*N*-*tert*-Butoxycarbonyl-4-hydroxypiperidin-2-one

Ee = 68%

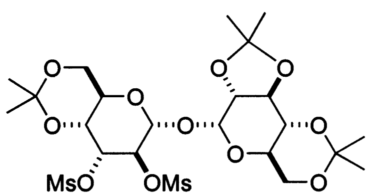
$[\alpha]_D^{25}$ = +6.7 (*c* 1.50, $CHCl_3$)

Source of chirality: regio- and stereoselective biohydroxylation

Absolute configuration: *R*

Kouichi Ohe,* Kiyoharu Morioka, Koji Yonehara and Sakae Uemura*

Tetrahedron: Asymmetry *13 (2002) 2155*



$C_{23}H_{38}O_{15}S_2$

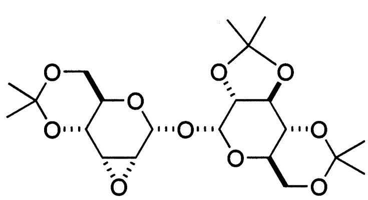
2,3:4,6-Di-*O*-isopropylidene-α-D-glucopyranosyl-(1,1)-4,6-*O*-isopropylidene-2,3-di-*O*-mesyl-α-D-glucopyranoside

Mp = 102.0–103.0°C

$[\alpha]_D^{23}$ = +103.0 (*c* 0.5, $CHCl_3$)

Kouichi Ohe,* Kiyoharu Morioka, Koji Yonehara and Sakae Uemura*

Tetrahedron: Asymmetry *13 (2002) 2155*



$C_{21}H_{32}O_{10}$

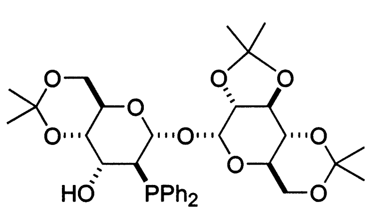
2,3:4,6-Di-*O*-isopropylidene-α-D-glucopyranosyl-(1,1)-2,3-anhydro-4,6-*O*-isopropylidene-α-D-allopyranoside

Mp = 76.4–77.5°C

$[\alpha]_D^{23}$ = +73.8 (*c* 0.5, $CHCl_3$)

Kouichi Ohe,* Kiyoharu Morioka, Koji Yonehara and Sakae Uemura*

Tetrahedron: Asymmetry *13 (2002) 2155*



$C_{33}H_{43}O_{10}P$

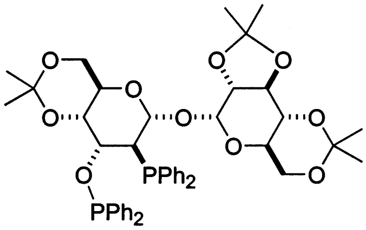
2,3:4,6-Di-*O*-isopropylidene-α-D-glucopyranosyl-(1,1)-4,6-*O*-isopropylidene-2-(diphenylphosphino)-2-deoxy-α-D-altropyranoside

Mp = 104.3–106.0°C

$[\alpha]_D^{23}$ = +78.9 (*c* 0.5, $CHCl_3$)

Kouichi Ohe,* Kiyoharu Morioka, Koji Yonehara and Sakae Uemura*

Tetrahedron: Asymmetry *13 (2002) 2155*



$C_{45}H_{52}O_{10}P_2$

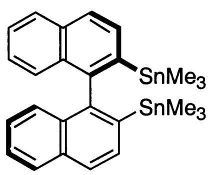
2,3:4,6-Di-*O*-isopropylidene-α-D-glucopyranosyl-(1,1)-4,6-*O*-isopropylidene-2-(diphenylphosphino)-2-deoxy-3-*O*-(diphenylphosphino)-α-D-altropyranoside

Mp = 90.3–92.0°C

$[\alpha]_D^{23}$ = +40.4 (*c* 0.25, $CHCl_3$)

Takashi Hoshi,* Hiroshi Shionoiri, Masayoshi Katano, Toshio Suzuki and Hisahiro Hagiwara*

Tetrahedron: Asymmetry *13 (2002) 2167*



$C_{26}H_{30}Sn_2$

(*R*)-2,2′-Bis(trimethylstannyl)-1,1′-binaphthyl

Ee = 91%

Mp = 77–80°C

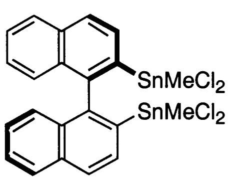
$[\alpha]_D^{20}$ = +10.2 (*c* 1.04, cyclohexane)

Source of chirality: (*R*)-2,2′-dibromo-1,1′-binaphthyl (91% ee)

Absolute configuration: *R*

Takashi Hoshi,* Hiroshi Shionoiri, Masayoshi Katano, Toshio Suzuki and Hisahiro Hagiwara*

Tetrahedron: Asymmetry *13 (2002) 2167*



$C_{22}H_{18}Cl_4Sn_2$

(*R*)-2,2′-Bis(dichloromethylstannyl)-1,1′-binaphthyl

Ee = 91%

Mp = 235–238°C

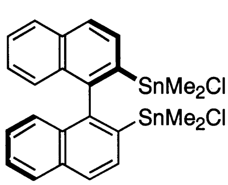
$[\alpha]_D^{20}$ = −9.20 (*c* 1.01, $CHCl_3$)

Source of chirality: (*R*)-2,2′-dibromo-1,1′-binaphthyl (91% ee)

Absolute configuration: *R*

Takashi Hoshi,* Hiroshi Shionoiri, Masayoshi Katano, Toshio Suzuki and Hisahiro Hagiwara*

Tetrahedron: Asymmetry *13 (2002) 2167*



$C_{24}H_{24}Cl_2Sn_2$

(*R*)-2,2′-Bis(chlorodimethylstannyl)-1,1′-binaphthyl

Ee = 91%

Mp = 124–127°C

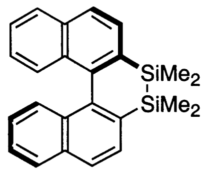
$[\alpha]_D^{20}$ = +13.5 (*c* 1.02, $CHCl_3$)

Source of chirality: (*R*)-2,2′-dibromo-1,1′-binaphthyl (91% ee)

Absolute configuration: *R*

Takashi Hoshi,* Hiroshi Shionoiri, Masayoshi Katano, Toshio Suzuki and Hisahiro Hagiwara*

Tetrahedron: Asymmetry *13 (2002) 2167*



$C_{24}H_{24}Si_2$

(*R*)-3,4-Disila-3,3,4,4-tetramethyl-3,4-dihydrodibenzo[*c*,*g*]phenanthrene

Ee >99%

Mp = 200–204°C

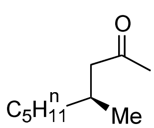
$[\alpha]_D^{20} = -757$ (*c* 0.83, cyclohexane)

Source of chirality: (*R*)-2,2′-dibromo-1,1′-binaphthyl (99% ee)

Absolute configuration: *R*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_{10}H_{20}O$

(*S*)-4-Methylnonan-2-one

E.e. = 85%

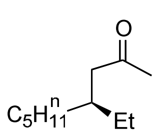
$[\alpha]_D = -3.3$ (*c* 0.31, MeOH)

Source of chirality: catalytic asymmetric conjugate addition

Absolute configuration: 4*S*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_{11}H_{22}O$

(*S*)-4-Ethylnonan-2-one

E.e. = 62%

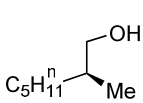
$[\alpha]_D = -2.4$ (*c* 0.31, MeOH)

Source of chirality: catalytic asymmetric conjugate addition

Absolute configuration: 4*S*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_8H_{18}O$

(*S*)-2-Methylheptan-1-ol

E.e. >98%

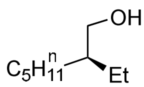
$[\alpha]_D = -15.5$ (*c* 0.31, MeOH)

Source of chirality: alkylation of Evans' auxiliary followed by $LiAlH_4$

Absolute configuration: 2*S*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_9H_{20}O$

(*S*)-2-Ethylheptan-1-ol

E.e. >98%

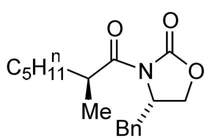
$[\alpha]_D = +6.8$ (*c* 0.31, MeOH)

Source of chirality: alkylation of Evans' auxiliary followed by $LiAlH_4$

Absolute configuration: 2*S*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_{18}H_{25}NO_3$

(4*S*)-Benzyl-3-((2*S*)-methylheptanoyl)oxazolidin-2-one

E.e. >98%

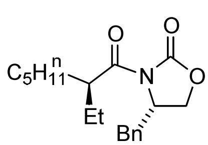
$[\alpha]_D = +140.0$ (*c* 0.30, Et_2O)

Source of chirality: alkalation of Evans' enolate

Absolute configuration: 2*S*,4*S*

Victor Garcia-Ruiz and Simon Woodward*

Tetrahedron: Asymmetry *13 (2002) 2177*



$C_{19}H_{27}NO_3$

(4*S*)-Benzyl-3-((2*S*)-ethylheptanoyl)oxazolidin-2-one

E.e. >98%

$[\alpha]_D = +126.7$ (*c* 0.30, Et_2O)

Source of chirality: alkylation of Evans' enolate

Absolute configuration: 2*S*,4*S*