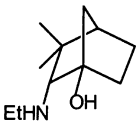
Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



$C_{11}H_{21}NO$

2-Ethylamino-3,3-dimethylnorbornan-1-ol

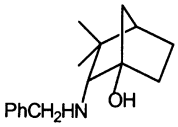
$[\alpha]_D^{20} = +25.4$ (c 0.90, MeOH)

Source of chirality: natural (1*R*)-Camphor

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

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



$C_{16}H_{23}NO$

2-Benzylamino-3,3-dimethylnorbornan-1-ol

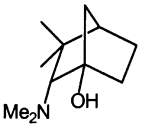
$[\alpha]_D^{20} = +22.2$ (c 0.46, MeOH)

Source of chirality: natural (1*R*)-Camphor

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

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



$C_{11}H_{21}NO$

2-Dimethylamino-3,3-dimethylnorbornan-1-ol

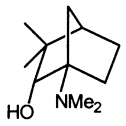
$[\alpha]_D^{20} = -1.2$ (c 0.80, MeOH)

Source of chirality: natural (1*R*)-Camphor

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

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



$C_{11}H_{21}NO$

1-Dimethylamino-3,3-dimethylnorbornan-2-ol

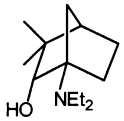
$[\alpha]_D^{20} = -26.5$ (c 0.85, MeOH)

Source of chirality: natural (1*R*)-Camphor

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

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



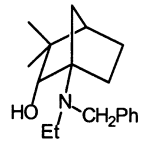
$C_{13}H_{25}NO$

1-Diethylamino-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20} = +27.1$ (c 0.84, MeOH)
Source of chirality: natural (1*R*)-Camphor
Absolute configuration: 1*R*,2*R*

Antonio García Martínez,* Enrique Teso Vilar,* Amelia García Fraile, Santiago de la Moya Cerero and Paloma Martínez-Ruiz

Tetrahedron: Asymmetry *13 (2002) 1457*



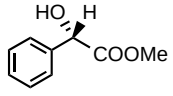
$C_{18}H_{27}NO$

1-[Benzyl(ethyl)amino]-3,3-dimethylnorbornan-2-ol

$[\alpha]_D^{20} = -25.8$ (c 0.88, MeOH)
Source of chirality: natural (1*R*)-Camphor
Absolute configuration: 1*R*,2*R*

Anju Chadha* and Baburaj Baskar

Tetrahedron: Asymmetry *13 (2002) 1461*



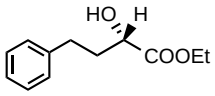
$C_9H_{10}O_3$

Methyl (*S*)-(+)-mandelate

E.e. >99%
$[\alpha]_D^{25} = +143$ (c 1, CH_3OH)
Source of chirality: biocatalytic deracemisation
Absolute configuration: *S*

Anju Chadha* and Baburaj Baskar

Tetrahedron: Asymmetry *13 (2002) 1461*



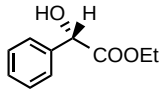
$C_{12}H_{16}O_3$

Ethyl (*S*)-(+)-2-hydroxy-4-phenylbutanoate

E.e. >99%
$[\alpha]_D^{25} = +7.5$ (c 1, EtOH)
Source of chirality: biocatalytic deracemisation
Absolute configuration: *S*

Anju Chadha* and Baburaj Baskar

Tetrahedron: Asymmetry *13 (2002) 1461*



$C_{10}H_{12}O_3$

Ethyl (*S*)-(+)-mandelate

E.e. >99%

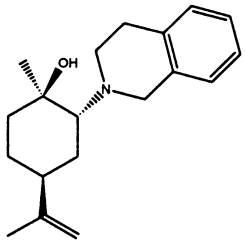
$[\alpha]_D^{25} = +134$ (*c* 3, $CHCl_3$)

Source of chirality: biocatalytic deracemisation

Absolute configuration: *S*

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*



$C_{19}H_{27}NO$

(1*R*,2*R*,4*S*)-1-Methyl-4-(1-methylethenyl)-2-[2-(1,2,3,4-tetrahydroisoquinolinyl)]cyclohexanol

Mp = 86–88°C

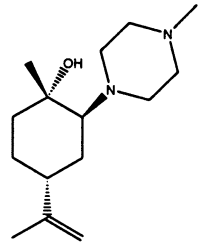
$[\alpha]_D^{23} = -5.2$ (*c*, 4.0, methanol)

Source of chirality: (−)-(4*S*)-limonene oxide

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

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*



$C_{15}H_{28}N_2O$

(1*S*,2*S*,4*R*)-1-Methyl-4-(1-methylethenyl)-2-(4-methyl-1-piperazinyl)cyclohexanol

Bp 143–147°C (2.6 torr)

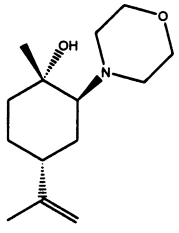
$[\alpha]_D^{23} = +27.1$ (*c*, 4.0, methanol)

Source of chirality: (+)-(4*R*)-limonene oxide

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

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*



$C_{14}H_{25}NO_2$

(1*S*,2*S*,4*R*)-1-Methyl-4-(1-methylethenyl)-2-(4-morpholinyl)cyclohexanol

Mp 43–44°C

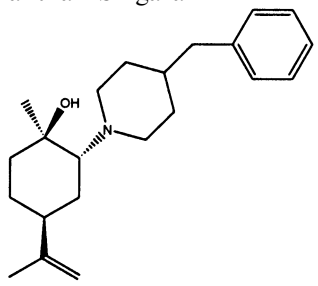
$[\alpha]_D^{23} = +37.5$ (*c*, 4.0, methanol)

Source of chirality: (+)-(4*R*)-limonene oxide

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

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*

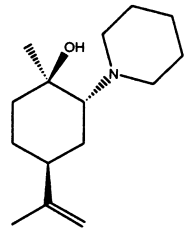


Mp 78–81°C
$[\alpha]_D^{23} = -14.5$ (*c*, 4.0, methanol)
Source of chirality: (–)-(4*S*)-limonene oxide
Absolute configuration: 1*R*,2*R*,4*S*

$C_{22}H_{33}NO$
(1*R*,2*R*,4*S*)-1-Methyl-4-(1-methylethenyl)-2-(4-benzyl-1-piperidinyl)cyclohexanol

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*

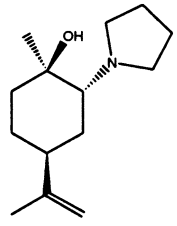


Bp 133–135°C (3.5 torr)
$[\alpha]_D^{23} = -13.5$ (*c*, 4.0, methanol)
Source of chirality: (–)-(4*S*)-limonene oxide
Absolute configuration: 1*R*,2*R*,4*S*

$C_{15}H_{27}NO$
(1*R*,2*R*,4*S*)-1-Methyl-4-(1-methylethenyl)-2-(1-piperidinyl)cyclohexanol

Derek Steiner, Steven G. Sethofer, Christian T. Goralski and Bakthan Singaram*

Tetrahedron: Asymmetry *13 (2002) 1477*

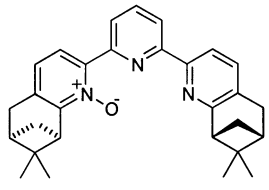


Bp 128–131°C (3.0 torr)
$[\alpha]_D^{23} = -34.9$ (*c*, 4.0, methanol)
Source of chirality: (–)-(4*S*)-limonene oxide
Absolute configuration: 1*R*,2*R*,4*S*

$C_{14}H_{25}NO$
(1*R*,2*R*,4*S*)-1-Methyl-4-(1-methylethenyl)-2-(1-pyrrolidinyl)cyclohexanol

Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*

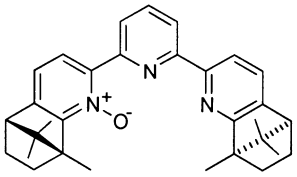


$[\alpha]_D = -29.6$ (*c* 0.45, $CHCl_3$)
Source of chirality: (1*R*)-(+)-nopinone
Absolute configuration: 6*R*,8*R*

$C_{29}H_{31}N_3O$
2-(1-*N*-Oxide-7,7-dimethyl-5,6,7,8-tetrahydro-6,8-methanoquinolin-2-yl)-6-(7,7-dimethyl-5,6,7,8-tetrahydro-6,8-methanoquinolin-2-yl)pyridine

Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*



$[\alpha]_D = -50.4$ (c 0.5, $CHCl_3$)
Source of chirality: (1*R*)-(+)-camphor
Absolute configuration: 5*S*,8*R*

$C_{31}H_{35}N_3O$

2-(1-*N*-Oxide-8,9,9-trimethyl-5,6,7,8-tetrahydro-5,8-methanoquinolin-2-yl)-6-(8,9,9-trimethyl-5,6,7,8-tetrahydro-5,8-methanoquinolin-2-yl)-pyridine

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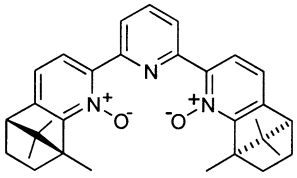
Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*



$[\alpha]_D = -17.8$ (c 0.5, $CHCl_3$)
Source of chirality: (1*R*)-(+)-camphor
Absolute configuration: 5*S*,8*R*

$C_{31}H_{35}N_3O$

2-(1-*N*-Oxide-8,9,9-trimethyl-5,6,7,8-tetrahydro-5,8-methanoquinolin-2-yl)-6-(8,9,9-trimethyl-5,6,7,8-tetrahydro-5,8-methanoquinolin-2-yl)-pyridine

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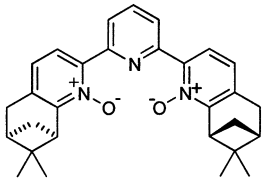
Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*



$[\alpha]_D = -1089.9$ (c 0.5, $CHCl_3$)
Source of chirality: (*R*)-(−)-isopinocamphenol
Absolute configuration: 5*R*,7*R*,8*S*

$C_{31}H_{35}N_3O$

2-(1-*N*-Oxide-6,6,8-trimethyl-5,6,7,8-tetrahydro-5,7-methanoquinolin-2-yl)-6-(6,6,8-trimethyl-5,6,7,8-tetrahydro-5,7-methanoquinolin-2-yl)-pyridine

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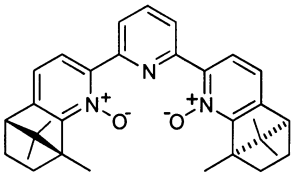
Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*



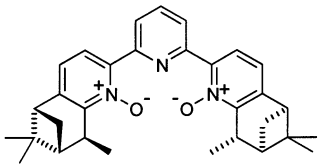
$[\alpha]_D = -214.2$ (c 0.5, $CHCl_3$)
Source of chirality: (1*R*)-(+)-nopinone
Absolute configuration: 6*R*,8*Rfl*

$C_{29}H_{31}N_3O_2$

2,6-Bis(1-*N*-oxide-7,7-dimethyl-5,6,7,8-tetrahydro-6,8-methanoquinolin-2-yl)pyridine

Wing-Leung Wong, Wing-Sze Lee and Hoi-Lun Kwong*

Tetrahedron: Asymmetry *13 (2002) 1485*



$C_{31}H_{35}N_3O_2$

2,6-Bis(1-*N*-oxide-6,6,8-trimethyl-5,6,7,8-tetrahydro-5,7-methanoquinolin-2-yl)pyridine

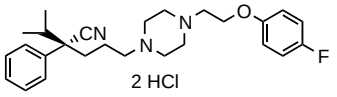
$[\alpha]_D = -74.7$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*R*)-(−)-isopinocamphenol

Absolute configuration: 5*R*,7*R*,8*S*

Yoshihiko Norimine,* Noboru Yamamoto, Yuichi Suzuki, Teiji Kimura, Koki Kawano, Koichi Ito, Satoshi Nagato, Yoichi Iimura and Masahiro Yonaga

Tetrahedron: Asymmetry *13 (2002) 1493*



$C_{26}H_{36}Cl_2FN_3O$

(2*S*)-5-{4-[2-(4-Fluorophenoxy)ethyl]piperazin-1-yl}-2-isopropyl-2-phenylpentanenitrile dihydrochloride (E2050)

Ee >99.9%

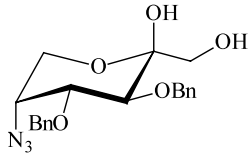
$[\alpha]_D^{29} = -5.2$ (*c* 0.73, EtOH)

Source of chirality: enzyme-catalyzed kinetic resolution

Absolute configuration: (2*S*)

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{20}H_{23}N_3O_5$

5-Azido-3,4-di-*O*-benzyl-5-deoxy-β-D-fructopyranose

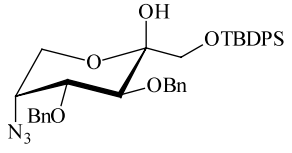
$[\alpha]_D$ −47 (*c* 1.4, chloroform)

Source of chirality: D-fructose

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

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{36}H_{41}N_3O_5Si$

5-Azido-3,4-di-*O*-benzyl-1-*O*-*tert*-butyldiphenylsilyl-5-deoxy-β-D-fructopyranose

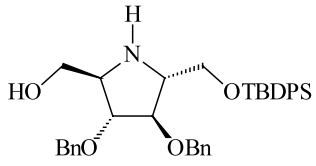
$[\alpha]_D$ −27 (*c* 1, chloroform)

Source of chirality: D-fructose

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

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{36}H_{43}NO_4Si$

$[\alpha]_D$ +11 (*c* 1, chloroform)

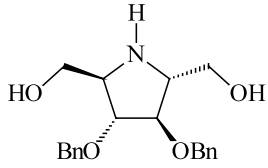
Source of chirality: D-fructose

Absolute configuration: 2*R*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy and chemical correlation)

(2*R*,3*R*,4*R*,5*R*)-3,4-Dibenzyloxy-2′-*O*-*tert*-butyldiphenylsilyl-2,5-bis(hydroxymethyl)pyrrolidine

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{20}H_{25}NO_4$

$[\alpha]_D$ +25 (*c* 1, chloroform)

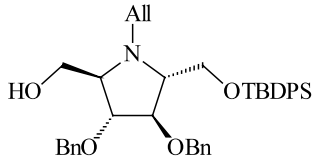
Source of chirality: D-fructose

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

(2*R*,3*R*,4*R*,5*R*)-3,4-Dibenzyloxy-2,5-bis(hydroxymethyl)pyrrolidine

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{39}H_{47}NO_4Si$

$[\alpha]_D$ +22 (*c* 1, chloroform)

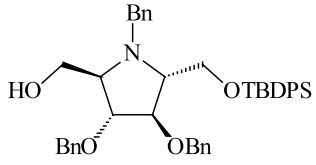
Source of chirality: D-fructose

Absolute configuration: 2*R*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy and chemical correlation)

(2*R*,3*R*,4*R*,5*R*)-*N*-Allyl-3,4-dibenzyloxy-2′-*O*-*tert*-butyldiphenylsilyl-2,5-bis(hydroxymethyl)pyrrolidine

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{43}H_{49}NO_4Si$

$[\alpha]_D$ −12 (*c* 1, chloroform)

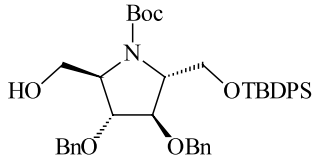
Source of chirality: D-fructose

Absolute configuration: 2*R*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy and chemical correlation)

(2*R*,3*R*,4*R*,5*R*)-*N*-Benzyl-3,4-dibenzyloxy-2′-*O*-*tert*-butyldiphenylsilyl-2,5-bis(hydroxymethyl)pyrrolidine

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1503*



$C_{41}H_{51}NO_6Si$

$[\alpha]_D$ −5 (*c* 1, chloroform)

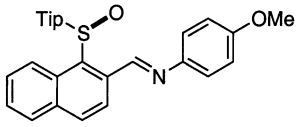
Source of chirality: D-fructose

Absolute configuration: 2*R*,3*R*,4*R*,5*R* (assigned by NMR spectroscopy and chemical correlation)

(2*R*,3*R*,4*R*,5*R*)-*N*-*tert*-Butyloxycarbonyl-3,4-dibenzyloxy-2′-*O*-*tert*-butyldiphenylsilyl-2,5-bis(hydroxymethyl)pyrrolidine

Shuichi Nakamura, Hiroki Yasuda and Takeshi Toru*

Tetrahedron: Asymmetry *13 (2002) 1509*



$C_{33}H_{37}NO_2S$

Ee = 94%

$[\alpha]_D^{20} = -589.5$ (*c* 0.23, $CHCl_3$)

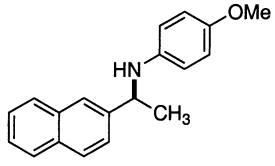
Source of chirality: asymmetric synthesis

Absolute configuration: *R*

(*R*)-*N*-(*p*-Methoxyphenyl)-[1-(2,4,6-triisopropylphenylsulfinyl)-2-naphthyl]methanimine

Shuichi Nakamura, Hiroki Yasuda and Takeshi Toru*

Tetrahedron: Asymmetry *13 (2002) 1509*



$C_{19}H_{19}NO$

Ee = 94%

$[\alpha]_D^{20} = +15.6$ (*c* 0.194, $CHCl_3$)

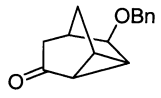
Source of chirality: asymmetric synthesis

Absolute configuration: *S*

(*S*)-*N*-(4-Methoxyphenyl)-1-(2-naphthyl)ethylamine

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



$C_{15}H_{16}O_2$

Ee = 88%

$[\alpha]_D^{30} = -3.2$ (*c* 0.5, $CHCl_3$)

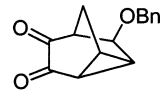
Source of chirality: asymmetric synthesis

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

(1*R*,2*R*,5*R*,6*R*,7*S*)-6-Benzyloxytricyclo[3.2.1.$0^{2,7}$]octan-3-one

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



Ee = 95%

$[\alpha]_D^{22} = -80.4$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

$C_{15}H_{14}O_3$

(1*R*,2*R*,5*S*,6*S*,7*S*)-6-Benzyloxytricyclo[3.2.1.$0^{2,7}$]octane-3,4-dione

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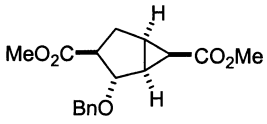
Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



Ee = 95%

$[\alpha]_D^{26} = -11.7$ (*c* 1.04, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

$C_{17}H_{20}O_5$

Dimethyl (1*S*,2*S*,3*S*,5*R*,6*R*)-2-benzyloxybicyclo[3.1.0]hexane-3,6-dicarboxylate

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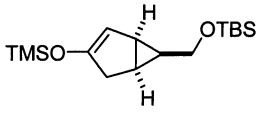
Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



Ee = 86%

$[\alpha]_D^{26} = +59.6$ (*c* 1.16, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: not determined

$C_{16}H_{32}O_2Si_2$

(1*R**,5*S**,6*S**)-6-(*tert*-Butyldimethylsilyloxymethyl)-3-(trimethylsilyloxy)bicyclo[3.1.0]hex-2-ene

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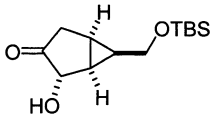
Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



Ee = 86%

$[\alpha]_D^{26} = -19.6$ (*c* 1.09, $CHCl_3$)

Source of chirality: asymmetric synthesis

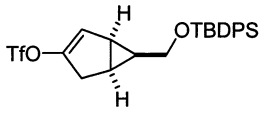
Absolute configuration: not determined

$C_{13}H_{24}O_3Si$

(1*R**,2*R**,5*R**,6*S**)-6-(*tert*-Butyldimethylsilyloxymethyl)-2-hydroxybicyclo[3.1.0]hexan-3-one

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



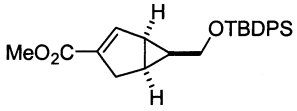
Ee = 77%
$[\alpha]_D^{26} = -57.8$ (*c* 0.92, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,5*S*,6*S*)

$C_{24}H_{27}F_3O_4SSi$

(1*R*,5*S*,6*S*)-6-(*tert*-Butyldiphenylsilyloxymethyl)bicyclo[3.1.0]hex-2-ene-3-yl triflate

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



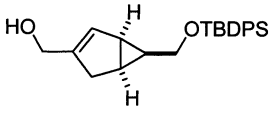
Ee = 77%
$[\alpha]_D^{22} = -110.8$ (*c* 1.27, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,5*S*,6*S*)

$C_{25}H_{30}O_3Si$

Methyl (1*S*,5*S*,6*S*)-6-(*tert*-butyldiphenylsilyloxymethyl)bicyclo[3.1.0]hex-2-ene-3-carboxylate

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



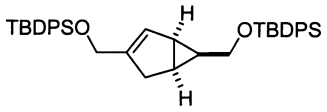
Ee = 77%
$[\alpha]_D^{18} = -109.3$ (*c* 1.50, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,5*S*,6*S*)

$C_{24}H_{30}O_2Si$

(1*S*,5*S*,6*S*)-6-(*tert*-Butyldiphenylsilyloxymethyl)-3-(hydroxymethyl)bicyclo[3.1.0]hex-2-ene

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



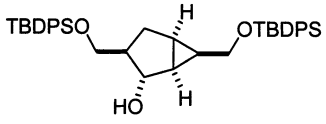
Ee = 82%
$[\alpha]_D^{18} = -60.5$ (*c* 1.20, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,5*S*,6*S*)

$C_{40}H_{48}O_2Si_2$

(1*S*,5*S*,6*S*)-3,6-Bis(*tert*-butyldiphenylsilyloxymethyl)bicyclo[3.1.0]hex-2-ene

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



$C_{40}H_{50}O_3Si_2$

(1*S*,2*S*,3*R*,5*S*,6*R*)-3,6-Bis(*tert*-butyldiphenylsilyloxymethyl)bicyclo[3.1.0]hexan-2-ol

Ee = 97%

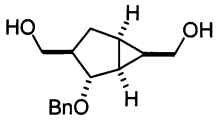
$[\alpha]_D^{14} = -17.2$ (*c* 1.79, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



$C_{15}H_{20}O_3$

(1*S*,2*S*,3*R*,5*S*,6*R*)-2-Benzyloxy-3,6-bis(hydroxymethyl)bicyclo[3.1.0]hexane

Ee = 96%

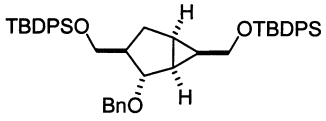
$[\alpha]_D^{22} = +33.8$ (*c* 1.24, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Hitoshi Abe,* Takenori Tsujino, Kenta Araki, Yasuo Takeuchi and Takashi Harayama*

Tetrahedron: Asymmetry *13 (2002) 1519*



$C_{47}H_{56}O_3Si_2$

(1*S*,2*S*,3*R*,5*S*,6*R*)-2-Benzyloxy-3,6-bis(*tert*-butyldiphenylsilyloxymethyl)bicyclo[3.1.0]hexane

Ee = 95%

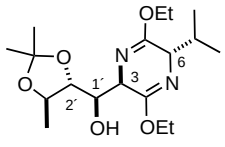
$[\alpha]_D^{20} = -8.8$ (*c* 2.18, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{18}H_{32}N_2O_5$

2,5-Diethoxy-3,6-dihydro-3-(1-hydroxy-2,3-isopropylidenedioxybutyl)-6-isopropylpyrazine

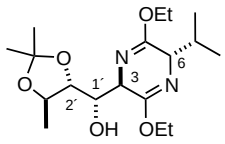
$[\alpha]_D^{22} = +14.5$ (*c* 1.5, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

Absolute configuration: 3*R*,6*S*,1′*R*,2′*S*,3′*R*

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



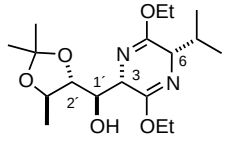
$[\alpha]_D^{22} = +8.9$ (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,6*S*,1′*S*,2′*S*,3′*R*

$C_{18}H_{32}N_2O_5$

2,5-Diethoxy-3,6-dihydro-3-(1-hydroxy-2,3-isopropylidenedioxybutyl)-6-isopropylpyrazine

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



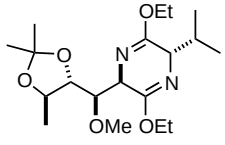
$[\alpha]_D^{22} = +62.4$ (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*S*,6*S*,1′*R*,2′*S*,3′*R*

$C_{18}H_{32}N_2O_5$

2,5-Diethoxy-3,6-dihydro-3-(1-hydroxy-2,3-isopropylidenedioxybutyl)-6-isopropylpyrazine

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



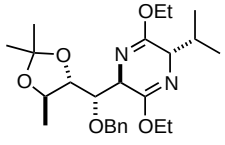
$[\alpha]_D^{22} = -41.2$ (c 2.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,6*S*,1′*R*,2′*S*,3′*R*

$C_{19}H_{34}N_2O_5$

2,5-Diethoxy-3,6-dihydro-3-(2,3-isopropylidenedioxy-1-methoxybutyl)-6-isopropylpyrazine

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



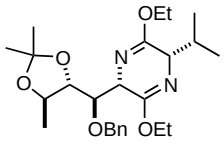
$[\alpha]_D^{22} = -13.3$ (c 0.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,6*S*,1′*S*,2′*S*,3′*R*

$C_{25}H_{38}N_2O_5$

3-(1-Benzyloxy-2,3-isopropylidenedioxybutyl)-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{25}H_{38}N_2O_5$

3-(1-Benzyloxy-2,3-isopropylidenedioxybutyl)-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

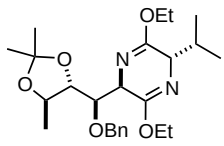
$[\alpha]_D^{23} = +26.1$ (c 1.0, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

Absolute configuration: 3*R*,6*S*,1′*R*,2′*S*,3′*R*

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{25}H_{38}N_2O_5$

3-(1-Benzyloxy-2,3-isopropylidenedioxybutyl)-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

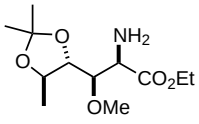
$[\alpha]_D^{22} = -65.2$ (c 1.5, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

Absolute configuration: 3*R*,6*S*,1′*R*,2′*S*,3′*Rfl*

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{12}H_{23}NO_5$

Ethyl 2-amino-4,5-isopropylidenedioxy-3-methoxyhexanoate

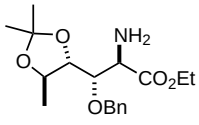
$[\alpha]_D^{22} = -15.0$ (c 1.9, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{18}H_{27}NO_5$

Ethyl 2-amino-3-benzyloxy-4,5-isopropylidenedioxyhexanoate

$[\alpha]_D^{22} = -13.3$ (c 1.0, CH_2Cl_2)

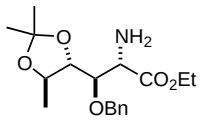
Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{26} = -4.0$ (c 1.1, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*S*,3*R*,4*S*,5*R*

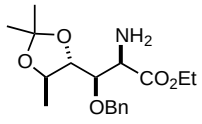


$C_{18}H_{27}NO_5$
Ethyl 2-amino-3-benzyloxy-4,5-isopropylidenedioxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{26} = -20.7$ (c 1.1, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*

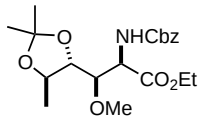


$C_{18}H_{27}NO_5$
Ethyl 2-amino-3-benzyloxy-4,5-isopropylidenedioxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{22} = -5.3$ (c 2.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*

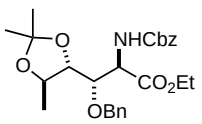


$C_{20}H_{29}NO_7$
Ethyl 2-[*N*-(benzyloxycarbonyl)amino]-4,5-isopropylidenedioxy-3-methoxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{21} = -5.4$ (c 0.5, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*S*,4*S*,5*R*

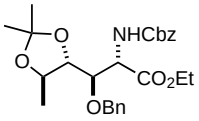


$C_{26}H_{33}NO_7$
Ethyl 3-benzyloxy-2-[*N*-(benzyloxycarbonyl)amino]-4,5-isopropylidenedioxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{21} = -1.4$ (c 1.2, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*S*,3*R*,4*S*,5*R*



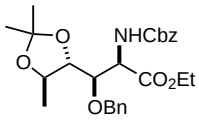
$C_{26}H_{33}NO_7$

Ethyl 3-benzyloxy-2-[*N*-(benzyloxycarbonyl)amino]-4,5-isopropylidenedioxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{21} = -14.6$ (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*



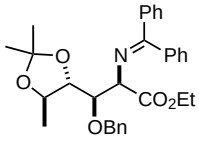
$C_{26}H_{33}NO_7$

Ethyl 3-benzyloxy-2-[*N*-(benzyloxycarbonyl)amino]-4,5-isopropylidenedioxyhexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{25} = +91.4$ (c 0.8, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*



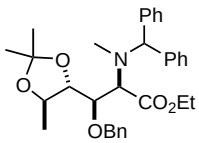
$C_{31}H_{35}NO_5$

Ethyl 3-benzyloxy-4,5-isopropylidenedioxy-2-[*N*-(diphenylmethylene)amino]hexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{24} = +77.1$ (c 1.9, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*



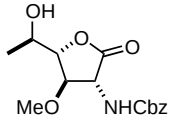
$C_{32}H_{39}NO_5$

Ethyl 3-benzyloxy-4,5-isopropylidenedioxy-2-[*N*-methyl-*N*-(diphenylmethyl)amino]hexanoate

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{20} = -28.2$ (*c* 1.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*



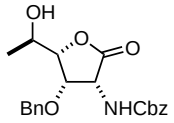
$C_{15}H_{19}NO_6$

3-[*N*-(Benzyloxycarbonyl)amino]-5-(1-hydroxyethyl)-4-methoxytetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{23} = -53.4$ (*c* 0.9, acetone)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*S*,5*S*,1′*R*



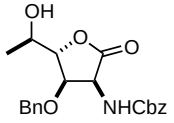
$C_{21}H_{23}NO_6$

4-Benzyloxy-3-[*N*-(benzyloxycarbonyl)amino]-5-(1-hydroxyethyl)tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{21} = +4.3$ (*c* 1.4, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*S*,4*R*,5*S*,1′*R*



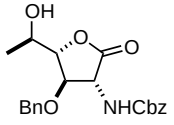
$C_{21}H_{23}NO_6$

4-Benzyloxy-3-[*N*-(benzyloxycarbonyl)amino]-5-(1-hydroxyethyl)tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*

$[\alpha]_D^{24} = -23.6$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*

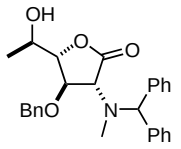


$C_{21}H_{23}NO_6$

4-Benzyloxy-3-[*N*-(benzyloxycarbonyl)amino]-5-(1-hydroxyethyl)tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



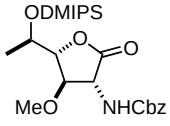
$C_{27}H_{29}NO_4$

$[\alpha]_D^{22} = +12.1$ (c 0.9, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*

4-Benzyloxy-5-(1-hydroxyethyl)-3-[*N*-methyl-*N*-(diphenylmethyl)amino]tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



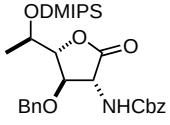
$C_{20}H_{31}NO_6Si$

$[\alpha]_D^{22} = -34.1$ (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*

3-[*N*-(Benzyloxycarbonyl)amino]-5-[1-isopropyldimethylsilanyloxy)ethyl)]-4-methoxytetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



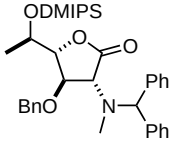
$C_{26}H_{35}NO_6Si$

$[\alpha]_D^{22} = -26.7$ (c 1.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*

4-Benzyloxy-3-[*N*-(benzyloxycarbonyl)amino]-5-[1-isopropyldimethylsilanyloxy)ethyl)]tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



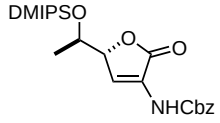
$C_{32}H_{41}NO_4Si$

$[\alpha]_D^{22} = +8.5$ (c 2.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,4*R*,5*S*,1′*R*

4-Benzyloxy-5-[1-(isopropyldimethylsilanyloxy)ethyl)]-3-[*N*-methyl-*N*-(diphenylmethyl)amino]tetrahydrofuran-2-one

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$[\alpha]_D^{24} = -5.1$ (c 0.8, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 5*S*,1′*R*

$C_{19}H_{27}NO_5Si$

3-[*N*-(Benzyloxycarbonyl)amino]-5-[1-(isopropyldimethylsilanyloxy)ethyl)]-5*H*-furan-2-one

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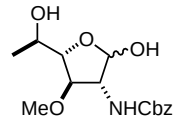
María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$[\alpha]_D^{24} = +2.7$ (c 0.7, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*S*,5*R*

$C_{15}H_{21}NO_6$

2-[*N*-(Benzyloxycarbonyl)amino]-2,6-dideoxy-3-*O*-methyl-D-galactose

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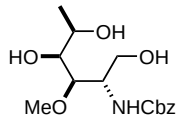
María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$[\alpha]_D^{23} = -17.7$ (c 2.0, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 1*S*,2*R*,3*S*,4*R*

$C_{15}H_{23}NO_6$

(3,4-Dihydroxy-1-hydroxymethyl-2-methoxypentyl)carbamic acid benzyl ester

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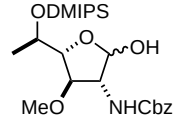
María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



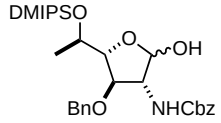
$[\alpha]_D^{22} = -22.4$ (c 2.9, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*R*,3*R*,4*R*,5*R*

$C_{20}H_{33}NO_6Si$

2-*N*-[(Benzyloxycarbonyl)amino]-2,6-dideoxy-5-*O*-(isopropyldimethylsilyl)-3-*O*-methyl-D-galactofuranose

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{26}H_{37}NO_6Si$

3-*O*-Benzyl-2-*N*-(benzyloxycarbonyl)amino-2,6-dideoxy-5-*O*-(isopropyldimethylsilyl)-D-galactofuranose

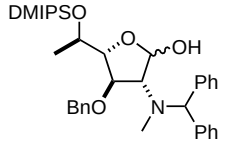
$[\alpha]_D^{20} = -54.1$ (*c* 2.5, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_{32}H_{43}NO_4Si$

3-*O*-Benzyl-2,6-dideoxy-5-*O*-(isopropyldimethylsilyl)-2-[*N*-methyl-*N*-(diphenylmethyl)amino]-D-galactofuranoses

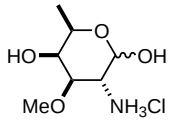
$[\alpha]_D^{24} = -33.0$ (*c* 2.4, CH_2Cl_2)

Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_7H_{16}ClNO_4$

2-Amino-2,6-dideoxy-3-*O*-methyl-D-galactose hydrochloride

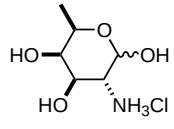
$[\alpha]_D^{22} = +92.1$ (final, *c* 0.6, H_2O)

Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_6H_{14}ClNO_4$

D-Fucosamine hydrochloride

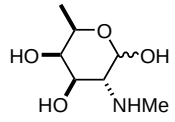
$[\alpha]_D^{23} = +76.1$ (final, *c* 0.6, H_2O)

Source of chirality: asymmetric aldol reaction

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

María Ruiz,* Vicente Ojea and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 1535*



$C_7H_{15}NO_4$

N-Methyl-D-fucosamine

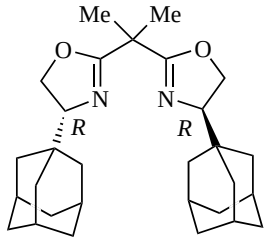
$[\alpha]_D^{25} = +69.0$ (final, *c* 0.1, H_2O)

Source of chirality: asymmetric aldol reaction

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

Jaume Clariana, Josep Comelles, Marcial Moreno-Mañas* and Adelina Vallribera

Tetrahedron: Asymmetry *13 (2002) 1551*



$C_{29}H_{42}N_2O_2$

2,2′-Isopropylidenebis[(4*R*)-(1-adamantyl)-2-oxazoline]

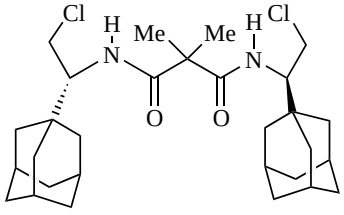
$[\alpha]_D = -28.3$ (*c* 0.92, dichloromethane)

Source of chirality: (*R*)-2-(1-adamantyl)-2-aminoethanol

Absolute configuration: *R*,*R*

Jaume Clariana, Josep Comelles, Marcial Moreno-Mañas* and Adelina Vallribera

Tetrahedron: Asymmetry *13 (2002) 1551*



$C_{29}H_{44}N_2O_2Cl_2$

N,*N*′-Bis[(1*R*)-(1-adamantyl)-2-chloroethyl]-2,3-dimethyl-1,3-propanodiamide

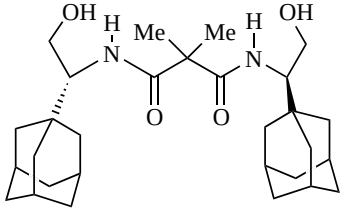
$[\alpha]_D = +116.4$ (*c* 0.55, dichloromethane)

Source of chirality: (*R*)-2-(1-adamantyl)-2-aminoethanol

Absolute configuration: *R*,*R*

Jaume Clariana, Josep Comelles, Marcial Moreno-Mañas* and Adelina Vallribera

Tetrahedron: Asymmetry *13 (2002) 1551*



$C_{29}H_{46}N_2O_4$

N,*N*′-Bis[(1*R*)-(1-adamantyl)-2-hydroxyethyl]-2,2-dimethyl-1,3-propanodiamine

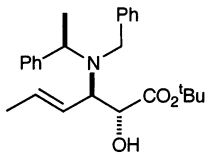
$[\alpha]_D = -36$ (*c* 0.55, dichloromethane)

Source of chirality: (*R*)-2-(1-adamantyl)-2-aminoethanol

Absolute configuration: *R*,*R*

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{25} = -64.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (4*E*,2*R*,3*R*,α*R*)

$C_{25}H_{33}NO_3$

(4*E*,2*R*,3*R*,α*R*)-*tert*-Butyl 2-hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)hex-4-enoate

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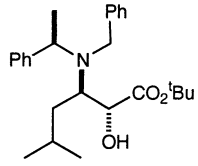
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{22} = -18.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

$C_{26}H_{37}NO_3$

(2*R*,3*R*,α*R*)-*tert*-Butyl 2-hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)-5-methylhexanoate

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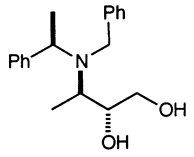
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{25} = -22.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

$C_{19}H_{25}NO_2$

(2*R*,3*R*,α*R*)-2-Hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)butanol

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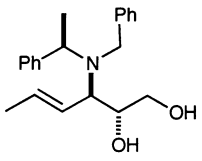
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{22} = -48.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

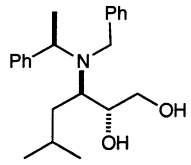
Absolute configuration: (4*E*,2*R*,3*R*,α*R*)

$C_{21}H_{27}NO_2$

(4*E*,2*R*,3*R*,α*R*)-2-Hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)hex-4-enol

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{22}H_{31}NO_2$

(2*R*,3*R*,α*R*)-2-Hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)-5-methylhexanol

D.e. >98% (^{1}H NMR analysis)

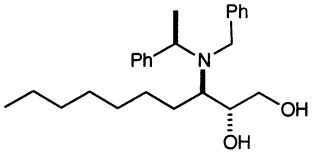
$[\alpha]_D^{25} = -21.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{25}H_{37}NO_2$

(2*R*,3*R*,α*R*)-2-Hydroxy-3-(*N*-benzyl-*N*-α-methylbenzyl)aminodecanol

D.e. >98% (^{1}H NMR analysis)

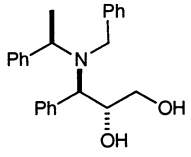
$[\alpha]_D^{25} = -37.6$ (*c* 1.1, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{24}H_{27}NO_2$

(2*R*,3*R*,α*R*)-2-Hydroxy-3-(*N*-benzyl-*N*-α-methylbenzylamino)-4-phenylbutanol

D.e. >98% (^{1}H NMR analysis)

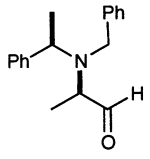
$[\alpha]_D^{22} = -48.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{18}H_{21}NO$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)propanal

D.e. = 98% (^{1}H NMR analysis)

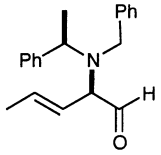
$[\alpha]_D^{22} = +1.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{20}H_{23}NO$

(3*E*,2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)pent-3-enal

D.e. = 96% (^{1}H NMR analysis)

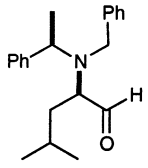
$[\alpha]_D^{24} = +14.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (3*E*,2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{21}H_{27}NO$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)-4-methylpentanal

D.e. = 98% (^{1}H NMR analysis)

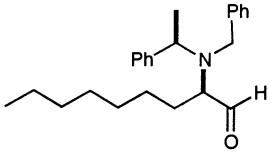
$[\alpha]_D^{22} = +1.3$ (*c* 0.63, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{24}H_{33}NO$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)nonanal

D.e. = 96% (^{1}H NMR analysis)

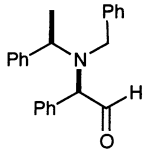
$[\alpha]_D^{22} = +1.1$ (*c* 0.75, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{23}H_{23}NO$

(2*R*,α*R*)-2-Phenyl-2-(*N*-benzyl-*N*-α-methylbenzylamino)ethanal

D.e. = 96% (^{1}H NMR analysis)

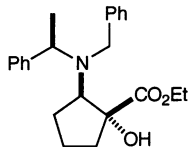
$[\alpha]_D^{22} = +1.1$ (*c* 0.75, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{25} = +11.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (1*S*,2*R*,α*R*)

$C_{23}H_{29}NO_3$

(1*S*,2*R*,α*R*)-Ethyl 1-hydroxy-2-(*N*-benzyl-*N*-α-methylbenzylamino)cyclopentanecarboxylate

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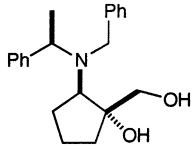
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{25} = -69.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (1*S*,2*R*,α*R*)

$C_{21}H_{27}NO_2$

(1*S*,2*R*,α*R*)-1-Hydroxymethyl-2-(*N*-benzyl-*N*-α-methylbenzylamino)cyclopentanol

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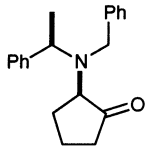
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. = 88% (^{1}H NMR analysis)

$[\alpha]_D^{24} = -11.3$ (*c* 0.75, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

$C_{20}H_{23}NO$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)cyclopentanone

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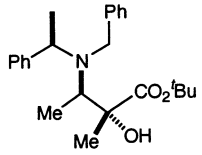
Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



D.e. >98% (^{1}H NMR analysis)

$[\alpha]_D^{22} = -36.8$ (*c* 2.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

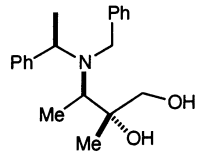
Absolute configuration: (2*R*,3*R*,α*R*)

$C_{24}H_{33}NO_3$

(2*R*,3*R*,α*R*)-*tert*-Butyl 2-hydroxy-2-methyl-3-(*N*-benzyl-*N*-α-methylbenzylamino)butanoate

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{20}H_{27}NO_2$

(2*S*,3*R*,α*R*)-2-Hydroxy-2-methyl-3-(*N*-benzyl-*N*-α-methylbenzylamino)butanol

D.e. >98% (^{1}H NMR analysis)

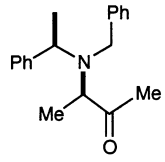
$[\alpha]_D^{22} = -14.5$ (*c* 0.6, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,3*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{19}H_{23}NO$

(3*R*,α*R*)-3-(*N*-Benzyl-*N*-α-methylbenzylamino)butan-2-one

D.e. = 88% (^{1}H NMR analysis)

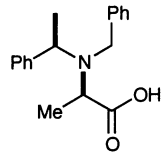
$[\alpha]_D^{21} = -74.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (3*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{18}H_{21}NO_2$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)propanoic acid

D.e. >98% (^{1}H NMR analysis)

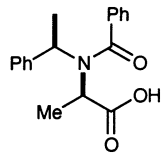
$[\alpha]_D^{24} = +27.7$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{18}H_{19}NO_3$

(2*R*,α*R*)-2-(*N*-Benzoyl-*N*-α-methylbenzylamino)propanoic acid

D.e. >98% (^{1}H NMR analysis)

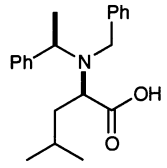
$[\alpha]_D^{24} = +81.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{21}H_{27}NO_2$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)-4-methylpentanoic acid

D.e. >98% (^{1}H NMR analysis)

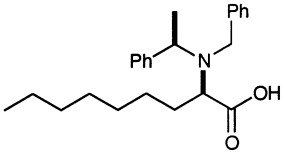
$[\alpha]_D^{25} = +28.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{24}H_{33}NO_2$

(2*R*,α*R*)-2-(*N*-Benzyl-*N*-α-methylbenzylamino)nonanoic acid

D.e. >98% (^{1}H NMR analysis)

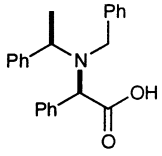
$[\alpha]_D^{25} = +4.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Stephen G. Davies,* Simon W. Epstein, A. Christopher Garner, Osamu Ichihara and Andrew D. Smith

Tetrahedron: Asymmetry *13 (2002) 1555*



$C_{23}H_{23}NO_2$

(2*R*,α*R*)-2-Phenyl-2-(*N*-benzyl-*N*-α-methylbenzylamino)ethanoic acid

D.e. >98% (^{1}H NMR analysis)

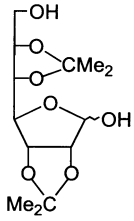
$[\alpha]_D^{25} = -12.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: α-methylbenzylamine and asymmetric synthesis

Absolute configuration: (2*R*,α*R*)

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



$C_{13}H_{22}O_7$

6-(5-Hydroxymethyl)-2,2-dimethyl-[1,3]dioxolan-4-yl)-2,2-dimethyl-(3a*S*,4*R*,6*R*,6a*S*)-tetrahydrofuro[3,4d][1,3]dioxol-4-ol

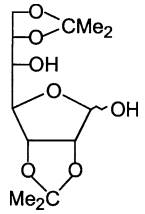
$[\alpha]_D = +6.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-*glycero*-*talo*-heptose

Absolute configuration: 3a*S*,4*R*,6*R*,6a*S*

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



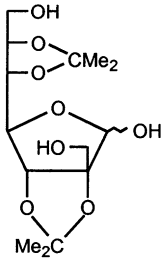
$C_{13}H_{22}O_7$

$[\alpha]_D = -2.8$ (c 0.714, $CHCl_3$)
Source of chirality: D-*glycero*-*talo*-heptose
Absolute configuration: 3a*S*,4*R*,6*R*,6a*S*

6-[(2,2-Dimethyl-[1,3]dioxolan-4-yl)-hydroxymethyl]-2,2-dimethyl-(3a*S*,4*R*,6*R*,6a*S*)-tetrahydrofuro[3,4d][1,3]dioxol-4-ol

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



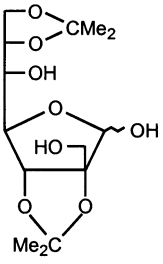
$C_{14}H_{24}O_8$

$[\alpha]_D = +5.0$ (c 1, $CHCl_3$)
Source of chirality: D-*glycero*-*talo*-heptose
Absolute configuration: 3a*S*,4*R*,6*R*,6a*S*

3a-Hydroxymethyl-6-(5-hydroxymethyl)-2,2-dimethyl-[1,3]dioxolan-4-yl)-2,2-dimethyl-(3a*S*,4*R*,6*R*,6a*S*)-tetrahydrofuro[3,4d][1,3]dioxol-4-ol

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



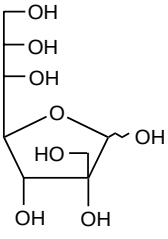
$C_{14}H_{24}O_8$

$[\alpha]_D = +12.0$ (c 1, $CHCl_3$)
Source of chirality: D-*glycero*-*talo*-heptose
Absolute configuration: 3a*S*,4*R*,6*R*,6a*S*

6-[(2,2-Dimethyl-[1,3]dioxolan-4-yl)-hydroxymethyl]-3a-hydroxymethyl-2,2-dimethyl-(3a*S*,4*R*,6*R*,6a*S*)-tetrahydrofuro[3,4d][1,3]dioxol-4-ol

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



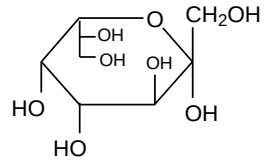
$C_8H_{16}O_8$

$[\alpha]_D = -3.8$ (c 1, H_2O)
Source of chirality: D-*glycero*-*talo*-heptose
Absolute configuration: 3*S*,4*S*,5*R*

3-Hydroxymethyl-5-(1,2,3-trihydroxypropyl)-(3*S*,4*S*,5*R*)-tetrahydrofuran-2,3,4-triol

Zuzana Hricovíniová

Tetrahedron: Asymmetry *13 (2002) 1567*



$C_8H_{16}O_8$

6-(1,2-Dihydroxyethyl)-2-hydroxymethyl-(2*R*,6*S*)-tetrahydropyran-2,3,4,5-tetrol

$[\alpha]_D = -61.7$(*c* 1, H_2O)

Source of chirality: D-*glycero*-*talo*-heptose

Absolute configuration: 2*R*,6*S*

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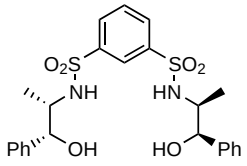
Tetrahedron: Asymmetry *13 (2002) 1573*



$C_{24}H_{28}N_2O_6S_2$

N,*N*′-Di[(1*S*,2*R*)-2-hydroxy-1-methyl-2-phenylethyl]-1,3-benzenedisulfonamide

E.e. = 100%

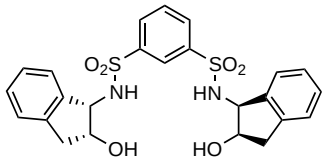
$[\alpha]_D^{25} = -8.9$ (*c* 2.05, EtOH)

Source of chirality: (1*R*,2*S*)-(−)-norephedrine

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

Miguel Yus,* Diego J. Ramón and Oscar Prieto

Tetrahedron: Asymmetry *13 (2002) 1573*



$C_{24}H_{24}N_2O_6S_2$

N,*N*′-Di[(1*R*,2*S*)-1-hydroxy-2,3-dihydro-1*H*-2-indenyl]-1,3-benzenedisulfonamide

E.e. = 100%

$[\alpha]_D^{25} = +9.8$ (*c* 2.85, DMSO)

Source of chirality: (1*S*,2*R*)-(−)-*cis*-1-amino-2-indanol

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

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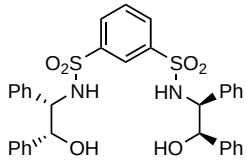
Tetrahedron: Asymmetry *13 (2002) 1573*



$C_{34}H_{32}N_2O_6S_6$

N,*N*′-Di[(1*S*,2*R*)-2-hydroxy-1,2-diphenylethyl]-1,3-benzenedisulfonamide

E.e. = 100%

$[\alpha]_D^{25} = -60.6$ (*c* 2.9, EtOH)

Source of chirality: (1*R*,2*S*)-(−)-2-amino-1,2-diphenylethanol

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

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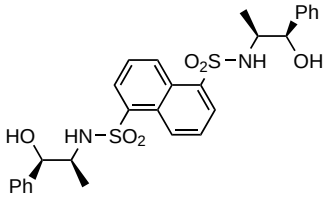
Tetrahedron: Asymmetry *13 (2002) 1573*



E.e. = 100%
$[\alpha]_D^{25} = -23.5$ (*c* 2.35, DMF)
Source of chirality: (1*R*,2*S*)-(−)-norephedrine
Absolute configuration: (1*S*,2*R*)

$C_{28}H_{30}N_2O_6S_2$
N,*N*′-Di[(1*S*,2*R*)-2-hydroxy-1-methyl-2-phenyl]-1,5-naphthalenedisulfonamide

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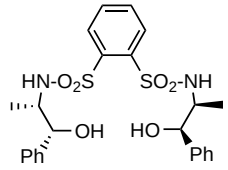
Tetrahedron: Asymmetry *13 (2002) 1573*



E.e. = 100%
$[\alpha]_D^{25} = -63.3$ (*c* 3.0, EtOH)
Source of chirality: (1*R*,2*S*)-(−)-norephedrine
Absolute configuration: (1*S*,2*R*)

$C_{24}H_{28}N_2O_6S_2$
N,*N*′-Di[(1*S*,2*R*)-2-hydroxy-1-methyl-2-phenylethyl]-1,2-benzenedisulfonamide

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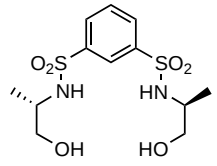
Tetrahedron: Asymmetry *13 (2002) 1573*



E.e. = 100%
$[\alpha]_D^{25} = -5.1$ (*c* 3.4, EtOH)
Source of chirality: (*S*)-(+)-2-amino-1-propanol
Absolute configuration: (1*S*)

$C_{12}H_{20}N_2O_6S_2$
N,*N*′-Di[(1*S*)-2-hydroxy-1-methylethyl]-1,3-benzenedisulfonamide

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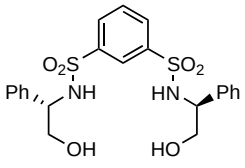
Tetrahedron: Asymmetry *13 (2002) 1573*



E.e. = 100%
$[\alpha]_D^{25} = +56.4$ (*c* 3.7, EtOH)
Source of chirality: (*S*)-(+)-2-phenylglycinol
Absolute configuration: (1*S*)

$C_{22}H_{24}N_2O_6S_6$
N,*N*′-Di[(1*S*)-2-hydroxy-1-phenylethyl]-1,3-benzenedisulfonamide

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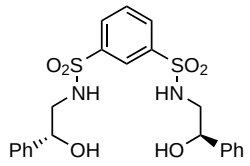
Tetrahedron: Asymmetry *13 (2002) 1573*



E.e. = 100%

$[\alpha]_D^{25} = -54.7$ (*c* 2.8, EtOH)

Source of chirality: (*R*)-(−)-2-amino-1-phenylethanol

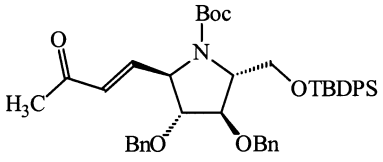
Absolute configuration: (2*R*)

$C_{22}H_{24}N_2O_6S_2$

N,*N*′-Di[(2*R*)-2-hydroxy-2-phenylethyl]-1,3-benzenedisulfonamide

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1581*



$[\alpha]_D$ +16 (*c* 1, $CHCl_3$)

Source of chirality: D-fructose and stereoselective synthesis

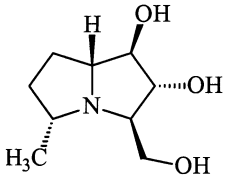
Absolute configuration: 2′*R*,3′*R*,4′*R*,5′*R* (assigned by NMR spectroscopy and chemical correlation)

$C_{44}H_{53}NO_6Si$

(*E*)-4-[(2′*R*,3′*R*,4′*R*,5′*R*)-3′,4′-Dibenzyloxy-*N*-*tert*-butyloxycarbonyl-5′-*tert*-butyldiphenylsilyloxymethylpyrrolidin-2′-yl]but-3-en-2-one

Isidoro Izquierdo,* María T. Plaza and Francisco Franco

Tetrahedron: Asymmetry *13 (2002) 1581*



$[\alpha]_D$ +14, $[\alpha]_{405}$ +42 (*c* 0.55, H_2O)

Source of chirality: D-fructose and stereoselective synthesis

Absolute configuration: 1*R*,2*R*,3*R*,5*R*,7a*R* (assigned by NMR spectroscopy and chemical correlation)

$C_9H_{18}NO_3$

(1*R*,2*R*,3*R*,5*R*,7a*R*)-1,2-Dihydroxy-3-hydroxymethyl-5-methylpyrrolizidine