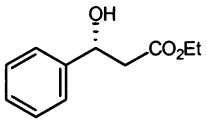
Carlos Magno R. Ribeiro,* Elisangela de S. Santos, Alessandro H. de O. Jardim, Mônica P. Maia, Fernando C. da Silva, Ana Paula D. Moreira and Vítor F. Ferreira

Tetrahedron: Asymmetry *13 (2002) 1703*



$C_{11}H_{14}O_3$

(+)-(3*R*)-Ethyl 3-phenyl-3-hydroxypropanoate

E.e. = 30%

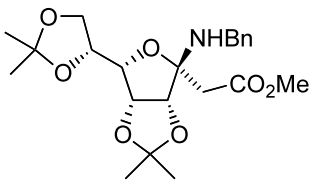
$[\alpha]_D^{21} = +13.6$ (*c* 1.1, $CHCl_3$)

Source of chirality: Reformatsky reaction

Absolute configuration: 3*R*

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$C_{22}H_{31}NO_7$

2,3-Dideoxy-4,5:7,8-di-*O*-isopropylidene-3-benzylamino-β-D-*gulo*-3-octulofuranosonic acid, methyl ester

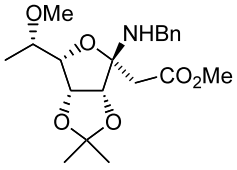
Mp 123°C

$[\alpha]_D^{26} = -9.6$ (*c* 0.9, $CHCl_3$)

Source of chirality: D-*gulono*-1,4-lactone

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$C_{20}H_{29}NO_6$

3-Benzylamino-2,3-dideoxy-4,5-*O*-isopropylidene-7-*O*-methyl-α-L-*rhamno*-3-octulofuranosonic acid, methyl ester

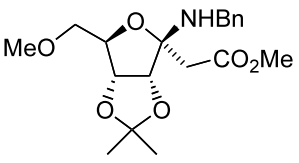
Mp 65°C

$[\alpha]_D^{26} = -20.7$ (*c* 1.3, $CHCl_3$)

Source of chirality: L-rhamnose

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$C_{19}H_{27}NO_6$

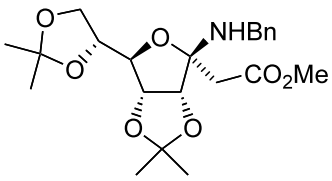
3-Benzylamino-2,3-dideoxy-4,5-*O*-isopropylidene-7-*O*-methyl-β-D-*ribo*-3-octulofuranosonic acid, methyl ester

$[\alpha]_D^{26} = -24.8$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-*ribono*-1,4-lactone

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$[\alpha]_D^{26} = +50.0$ (*c* 1.1, $CHCl_3$)

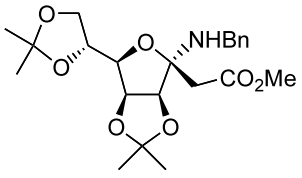
Source of chirality: D-glucose

$C_{22}H_{31}NO_7$

3-Benzylamino-2,3-dideoxy-4,5:7,8-di-*O*-isopropylidene-β-D-*allo*-3-octulofuranosonic acid, methyl ester

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$[\alpha]_D^{26} = -4.7$ (*c* 0.5, $CHCl_3$)

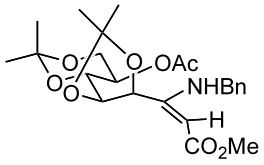
Source of chirality: D-mannose

$C_{22}H_{31}NO_7$

3-Benzylamino-2,3-dideoxy-4,5:7,8-di-*O*-isopropylidene-α-D-*manno*-3-octulofuranosonic acid, methyl ester

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$[\alpha]_D^{26} = -109.6$ (*c* 0.9, $CHCl_3$)

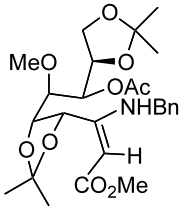
Source of chirality: D-mannose

$C_{24}H_{33}NO_8$

(2*E*)-7-*O*-Acetyl-3-benzylamino-2,3-dideoxy-4,5:6,8-di-*O*-isopropylidene-D-*manno*-oct-2-enoic acid, methyl ester

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$[\alpha]_D^{26} = +126.9$ (*c* 1.0, $CHCl_3$)

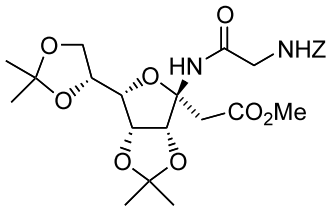
Source of chirality: natural (prepared from D-*glycero*-D-*gulo*-1,4-lactone)

$C_{26}H_{37}NO_9$

(2*E*)-7-*O*-Acetyl-3-benzylamino-2,3-dideoxy-4,5:8,9-di-*O*-isopropylidene-6-*O*-methyl-D-*glycero*-D-*gulo*-non-2-enoic acid, methyl ester

Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



$[\alpha]_D^{26} = +9.5$ (c 1.0, $CHCl_3$)

Source of chirality: natural (prepared from D-*gulono*-1,4-lactone)

$C_{25}H_{34}N_2O_{10}$

2,3-Dideoxy-4,5:7,8-di-*O*-isopropylidene-3-[[[[(phenylmethoxy)carbonyl]amino]acetyl]amino]-β-D-*gulo*-3-octulofuranosonic acid, methyl ester

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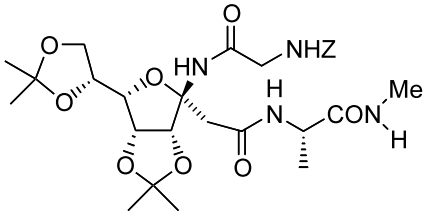
Claude Taillefumier, Younes Lakhrissi, Mohammed Lakhrissi and Yves Chapleur*

Tetrahedron: Asymmetry *13 (2002) 1707*



Mp 92–95°C (decomposition)

$[\alpha]_D^{26} = +18.4$ (c 0.9, $CHCl_3$)

Source of chirality: natural (prepared from D-*gulono*-1,4-lactone and L-alanine)

$C_{28}H_{40}N_4O_{10}$

N-[2,3-Dideoxy-4,5:7,8-di-*O*-isopropylidene-3-[[[[(phenylmethoxy)carbonyl]amino]acetyl]-amino]-β-D-*gulo*-3-octulofuranosonoyl]alanine methyl amide

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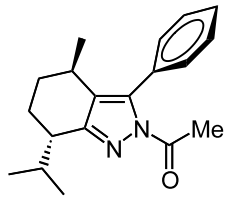
Choji Kashima,* Saori Mizuhara, Yohei Miwa and Yukihiro Yokoyama

Tetrahedron: Asymmetry *13 (2002) 1713*



Ee >95% (by NMR)

$[\alpha]_D = -268.5$ (c 0.46, $CHCl_3$)

Source of chirality: (−)-methanol

Absolute configuration: (4*R*,7*S*)

$C_{19}H_{24}N_2O$

(4*R*,7*S*)-2-Acetyl-3-phenyl-4-methyl-7-isopropyl-4,5,6,7-tetrahydro-1*H*-indazole

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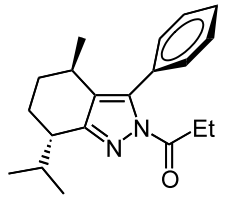
Choji Kashima,* Saori Mizuhara, Yohei Miwa and Yukihiro Yokoyama

Tetrahedron: Asymmetry *13 (2002) 1713*



Ee >95% (by NMR)

$[\alpha]_D = -243.3$ (c 0.48, $CHCl_3$)

Source of chirality: (−)-methanol

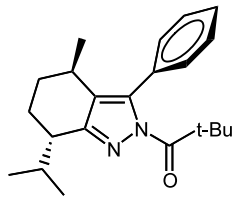
Absolute configuration: (4*R*,7*S*)

$C_{20}H_{26}N_2O$

(4*R*,7*S*)-2-Propanoyl-3-phenyl-4-methyl-7-isopropyl-4,5,6,7-tetrahydro-1*H*-indazole

Choji Kashima,* Saori Mizuhara, Yohei Miwa and Yukihiro Yokoyama

Tetrahedron: Asymmetry *13 (2002) 1713*



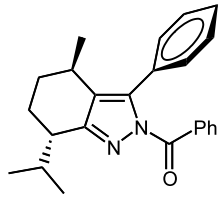
Ee >95% (by NMR)
$[\alpha]_D = -244.9$ (*c* 0.39, $CHCl_3$)
Source of chirality: (−)-methanol
Absolute configuration: (4*R*,7*S*)

$C_{22}H_{30}N_2O$

(4*R*,7*S*)-2-Pivaloyl-3-phenyl-4-methyl-7-isopropyl-4,5,6,7-tetrahydro-1*H*-indazole

Choji Kashima,* Saori Mizuhara, Yohei Miwa and Yukihiro Yokoyama

Tetrahedron: Asymmetry *13 (2002) 1713*



Ee >95% (by NMR)
$[\alpha]_D = -225.3$ (*c* 0.35, $CHCl_3$)
Source of chirality: (−)-methanol
Absolute configuration: (4*R*,7*S*)

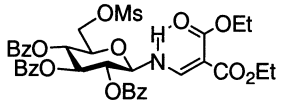
$C_{24}H_{26}N_2O$

(4*R*,7*S*)-2-Benzoyl-3-phenyl-4-methyl-7-isopropyl-4,5,6,7-tetrahydro-1*H*-indazole

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*

$[\alpha]_D = -33$ (*c* 1.1, CH_2Cl_2)
Source of chirality: D-glucose



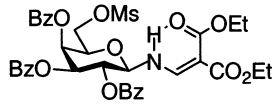
$C_{36}H_{37}NO_{14}S$

2,3,4-Tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-6-*O*-mesyl-β-D-glucopyranosylamine

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*

$[\alpha]_D = +7.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: D-galactose



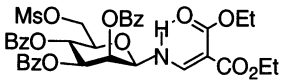
$C_{36}H_{37}NO_{14}S$

2,3,4-Tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-6-*O*-mesyl-β-D-galactopyranosylamine

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*

$[\alpha]_D = -39$ (*c* 1.0, CH_2Cl_2)
Source of chirality: D-mannose



$C_{36}H_{37}NO_{14}S$
2,3,4-Tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-6-*O*-mesyl-β-D-mannopyranosylamine

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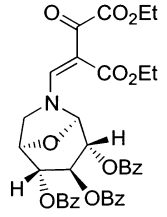
José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*



$[\alpha]_D = -69$ (*c* 1.0, CH_2Cl_2)
Source of chirality: D-glucose

$C_{35}H_{33}NO_{11}$
1,6-Anhydro-2,3,4-tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-β-D-glucopyranosylamine

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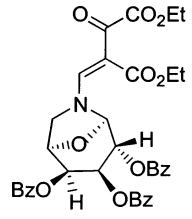
José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*



$[\alpha]_D = +5$ (*c* 0.7, CH_2Cl_2)
Source of chirality: D-galactose

$C_{35}H_{33}NO_{11}$
1,6-Anhydro-2,3,4-tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-β-D-galactopyranosylamine

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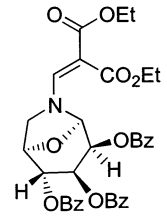
José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*

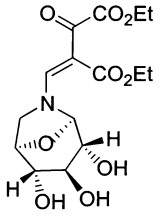


$[\alpha]_D = -2$ (*c* 0.7, CH_2Cl_2)
Source of chirality: D-mannose

$C_{35}H_{33}NO_4$
1,6-Anhydro-2,3,4-tri-*O*-benzoyl-*N*-(2,2-diethoxycarbonylvinyl)-β-D-mannopyranosylamine

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*



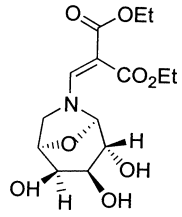
$[\alpha]_D = -9$ (*c* 1.0, CH_2Cl_2)
Source of chirality: D-glucose

$C_{14}H_{21}NO_8$

1,6-Anhydro-*N*-(2,2-diethoxycarbonylvinyl)-β-D-glucopyranosylamine

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*



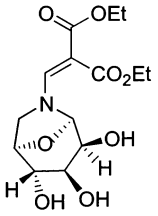
$[\alpha]_D = -54$ (*c* 1.0, MeOH)
Source of chirality: D-galactose

$C_{14}H_{21}NO_8$

1,6-Anhydro-*N*-(2,2-diethoxycarbonylvinyl)-β-D-galactopyranosylamine

José Fuentes,* Consolación Gasch, David Olano, M. Ángeles Pradera, Guillermo Repetto and Francisco J. Sayago

Tetrahedron: Asymmetry *13 (2002) 1743*



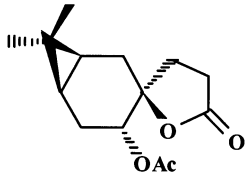
$[\alpha]_D = -138$ (*c* 0.7, MeOH)
Source of chirality: D-glucose

$C_{14}H_{21}NO_8$

1,6-Anhydro-*N*-(2,2-diethoxycarbonylvinyl)-β-D-mannopyranosylamine

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*



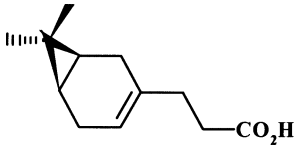
$[\alpha]_D^{26} = +14.8$ (*c* 3.7, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,4*R*,6*R*

$C_{14}H_{20}O_4$

(+)-(1*S*,3*R*,4*R*,6*R*)-7,7-Dimethyl-5′-oxodihydro-3′*H*-spiro[bicyclo[4.1.0]heptane-3,2′-furan]-4-yl acetate

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*

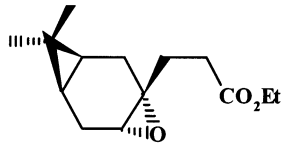


$[\alpha]_D^{26} = +23.6$ (*c* 3.4, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,6*R*

$C_{12}H_{18}O_2$
(+)-3-[(1*S*,6*R*)-7,7-Dimethylbicyclo[4.1.0]hept-3-en-3-yl]propanoic acid

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*

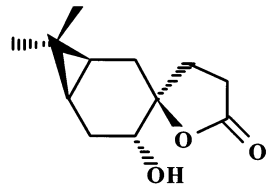


$[\alpha]_D^{26} = +15.9$ (*c* 8.2, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*S*,5*R*,7*R*

$C_{14}H_{22}O_3$
(+)-Ethyl 3-[(1*S*,3*S*,5*R*,7*R*)-8,8-dimethyloxatricyclo[5.1.0.$0^{3,5}$]oct-3-yl]propanoate

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*

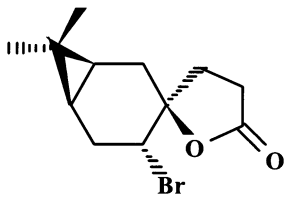


$[\alpha]_D^{26} = +16.6$ (*c* 10.6, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,4*R*,6*R*

$C_{12}H_{18}O_3$
(+)-(1*S*,3*R*,4*R*,6*R*)-4-Hydroxy-7,7-dimethyldihydro-5′*H*-spiro[bicyclo[4.1.0]heptane-3,2′-furan]-5′-one

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*

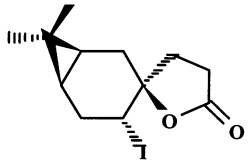


$[\alpha]_D^{26} = -32.1$ (*c* 3.2, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,4*R*,6*R*

$C_{12}H_{17}BrO_2$
(−)-(1*S*,3*R*,4*R*,6*R*)-4-Bromo-7,7-dimethyldihydro-5′*H*-spiro[bicyclo[4.1.0]heptane-3,2′-furan]-5′-one

Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*



$[\alpha]_D^{26} = -76.5$ (*c* 2.9, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,4*R*,6*R*

$C_{12}H_{17}IO_2$

(−)-(1*S*,3*R*,4*R*,6*R*)-4-Iodo-7,7-dimethyldihydro-5′*H*-spiro[bicyclo[4.1.0]heptane-3,2′-furan]-5′-one

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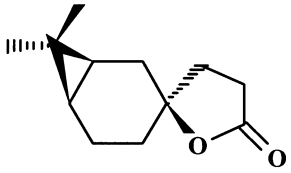
Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*



$[\alpha]_D^{26} = +18.9$ (*c* 1.3, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,6*R*

$C_{12}H_{18}O_2$

(+)-(1*S*,3*R*,6*R*)-7,7-Dimethyldihydro-5′*H*-spiro[bicyclo[4.1.0]heptane-3,2′-furan]-5′-one

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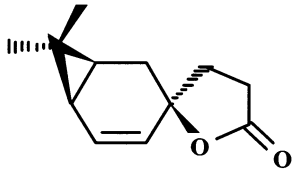
Stanisław Lochyński,* Bożena Frąckowiak, Teresa Olejniczak, Zbigniew Ciunik and Czesław Wawrzeńczyk*

Tetrahedron: Asymmetry *13 (2002) 1761*



$[\alpha]_D^{26} = -200.4$ (*c* 1.3, $CHCl_3$)
Source of chirality: (+)-3-carene
Absolute configuration: 1*S*,3*R*,6*R*

$C_{12}H_{16}O_2$

(−)-(1*S*,3*R*,6*R*)-7,7-Dimethyldihydro-5′*H*-spiro[bicyclo[4.1.0]hept-4-ene-3,2′-furan]-5′-one

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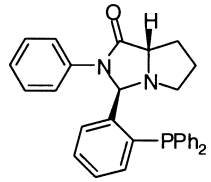
Kazutaka Shibatomi and Yasuhiro Uozumi*

Tetrahedron: Asymmetry *13 (2002) 1769*



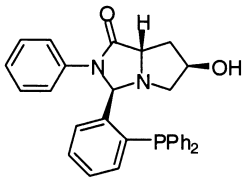
E.e. >99%
$[\alpha]_D^{19} = +44$ (*c* 1.4, chloroform)
Source of chirality: L-proline

$C_{30}H_{27}N_2OP$

(3*R*,7a*S*)-(3-(2-Diphenylphosphinophenyl)-2-phenyl)hexahydro-1*H*-pyrrolo[1,2-*c*]imidazol-1-one

Kazutaka Shibatomi and Yasuhiro Uozumi*

Tetrahedron: Asymmetry *13 (2002) 1769*



E.e. >99%

$[\alpha]_D^{19}=+9$ (*c* 1.6, chloroform)

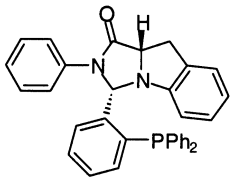
Source of chirality: *trans*-4-hydroxy-L-proline

$C_{30}H_{27}N_2OP$

(3*R*,7a*S*)-(3-(2-Diphenylphosphino)phenyl-6-hydroxy-2-phenyl)hexahydro-1*H*-pyrrolo[1,2-*c*]imidazol-1-one

Kazutaka Shibatomi and Yasuhiro Uozumi*

Tetrahedron: Asymmetry *13 (2002) 1769*



E.e. >99%

$[\alpha]_D^{25}=+135$ (*c* 1.0, chloroform)

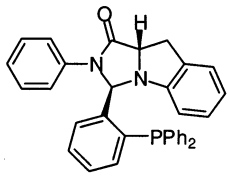
Source of chirality: (*S*)-indoline-2-carboxylic acid

$C_{34}H_{27}N_2OP$

(3*S*,9a*S*)-(3-(2-Diphenylphosphino)phenyl-2-phenyl)tetrahydro-1*H*-imidazo[1,5-*a*]indole-1-one

Kazutaka Shibatomi and Yasuhiro Uozumi*

Tetrahedron: Asymmetry *13 (2002) 1769*



E.e. >99%

$[\alpha]_D^{19}=+127$ (*c* 0.7, chloroform)

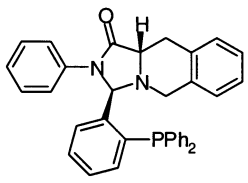
Source of chirality: (*S*)-indoline-2-carboxylic acid

$C_{34}H_{27}N_2OP$

(3*S*,9a*S*)-(3-(2-Diphenylphosphino)phenyl-2-phenyl)tetrahydro-1*H*-imidazo[1,5-*a*]indole-1-one

Kazutaka Shibatomi and Yasuhiro Uozumi*

Tetrahedron: Asymmetry *13 (2002) 1769*



E.e. >99%

$[\alpha]_D^{25}=+6$ (*c* 0.5, chloroform)

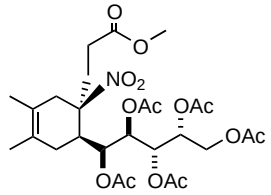
Source of chirality: (*S*)-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid

$C_{35}H_{29}N_2OP$

(3*R*,10a*S*)-(3-(2-Diphenylphosphino)phenyl-2-phenyl)tetrahydro-1*H*,5*H*-imidazo[1,5-*b*]isoquinoline-1-one

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +34.8$ (*c* 1.15, $CHCl_3$)

Source of chirality: chiral precursor

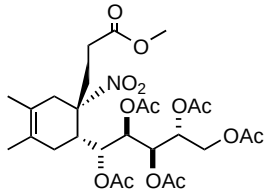
Absolute configuration: 4*R*,5*S*, D-*galacto*

$C_{27}H_{39}NO_{14}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*R*,5*S*)-1,2-dimethyl-4-(2″-methoxycarbonylethyl)-4-nitrocyclohex-1-en-5-yl]-D-*galacto*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +13.9$ (*c* 0.56, $CHCl_3$)

Source of chirality: chiral precursor

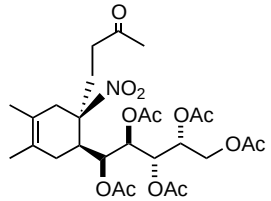
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{27}H_{39}NO_{14}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[4*S*,5*R*)-1,2-dimethyl-4-(2″-methoxycarbonylethyl)-4-nitrocyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +22.5$ (*c* 0.51, $CHCl_3$)

Source of chirality: chiral precursor

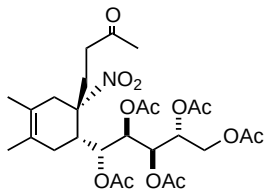
Absolute configuration: 4*R*,5*S*, D-*galacto*

$C_{27}H_{39}NO_{13}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*R*,5*S*)-1,2-dimethyl-4-nitro-4-(3″-oxobutyl)-cyclohex-1-en-5-yl]-D-*galacto*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +12.1$ (*c* 0.85, $CHCl_3$)

Source of chirality: chiral precursor

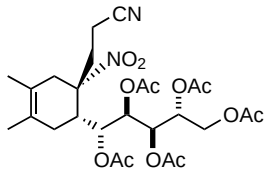
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{27}H_{39}NO_{13}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*S*,5*R*)-1,2-dimethyl-4-nitro-4-(3″-oxobutyl)-cyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +19.3$ (*c* 0.57, $CHCl_3$)

Source of chirality: chiral precursor

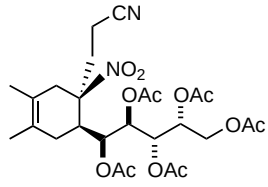
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{26}H_{36}N_2O_{12}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*S*,5*R*)-4-(2″-cyanoethyl)-1,2-dimethyl-4-nitrocyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +34.0$ (*c* 0.50, $CHCl_3$)

Source of chirality: chiral precursor

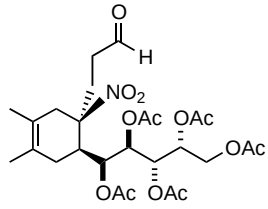
Absolute configuration: 4*R*,5*S*, D-*galacto*

$C_{26}H_{36}N_2O_{12}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*R*,5*S*)-4-(2″-cyanoethyl)-1,2-dimethyl-4-nitrocyclohex-1-en-5-yl]-D-*galacto*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +24.6$ (*c* 0.50, $CHCl_3$)

Source of chirality: chiral precursor

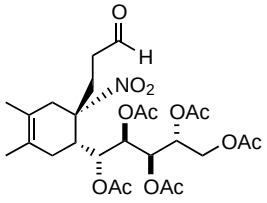
Absolute configuration: 4*R*,5*S*, D-*galacto*

$C_{26}H_{37}NO_{13}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*R*,5*S*)-4-(2″-formylethyl)-1,2-dimethyl-4-nitrocyclohex-1-en-5-yl]-D-*galacto*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



E.e. = 100%

$[\alpha]_D = +19.4$ (*c* 0.92, $CHCl_3$)

Source of chirality: chiral precursor

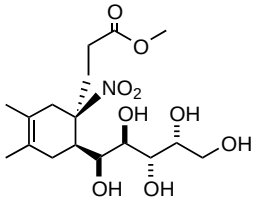
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{26}H_{37}NO_{13}$

1′,2′,3′,4′,5′-Penta-*O*-acetyl-1′-*C*-[(4*S*,5*R*)-4-(2″-formylethyl)-1,2-dimethyl-4-nitrocyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



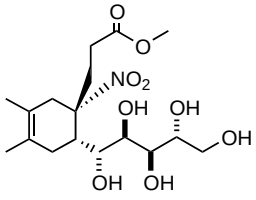
E.e. = 100%
$[\alpha]_D$ = +9.4 (*c* 0.64, MeOH)
Source of chirality: chiral precursor
Absolute configuration: 4*R*,5*S*, D-*galacto*

$C_{17}H_{29}NO_9$

1′-*C*-[(4*R*,5*S*)-1,2-Dimethyl-4-(2″-methoxycarbonylethyl)-4-nitrocyclohex-1-en-5-yl]-D-*galacto*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



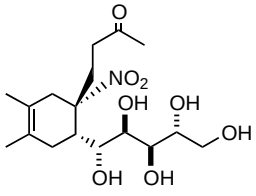
E.e. = 100%
$[\alpha]_D$ = +65.2 (*c* 0.52, $CHCl_3$)
Source of chirality: chiral precursor
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{17}H_{29}NO_9$

1′-*C*-[(4*S*,5*R*)-1,2-Dimethyl-4-(2″-methoxycarbonylethyl)-4-nitrocyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



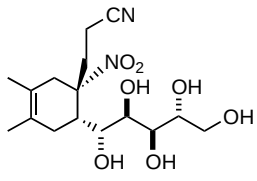
E.e. = 100%
$[\alpha]_D$ = +5.8 (*c* 0.52, H_2O)
Source of chirality: chiral precursor
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{17}H_{29}NO_8$

1′-*C*-[(4*S*,5*R*)-1,2-Dimethyl-4-nitro-4-(3″-oxobutyl)-cyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



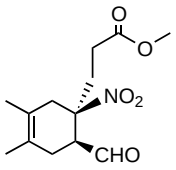
E.e. = 100%
$[\alpha]_D$ = +13.1 (*c* 0.49, MeOH)
Source of chirality: chiral precursor
Absolute configuration: 4*S*,5*R*, D-*manno*

$C_{16}H_{26}N_2O_7$

1′-*C*-[(4*S*,5*R*)-4-(2″-Cyanoethyl)-1,2-dimethyl-4-nitrocyclohex-1-en-5-yl]-D-*manno*-pentitol

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



$C_{13}H_{19}NO_5$

(4*R*,5*S*)-5-Formyl-1,2-dimethyl-4-(2″-methoxycarbonylethyl)-4-nitrocyclohex-1-ene

E.e. = 100%

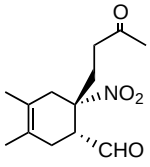
$[\alpha]_D = -2.6$ (*c* 0.52, $CHCl_3$)

Source of chirality: chiral precursor

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

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



$C_{13}H_{19}NO_4$

(4*S*,5*R*)-5-Formyl-1,2-dimethyl-4-nitro-4-(3″-oxobutyl)-cyclohex-1-ene

E.e. = 100%

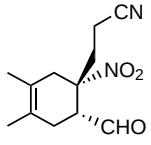
$[\alpha]_D = +0.9$ (*c* 0.54, $CHCl_3$)

Source of chirality: chiral precursor

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

R. Ballini, G. Bosica, M. V. Gil, E. Román* and J. A. Serrano

Tetrahedron: Asymmetry *13 (2002) 1773*



$C_{12}H_{16}N_2O_3$

(4*S*,5*R*)-4-(2″-Cyanoethyl)-5-formyl-1,2-dimethyl-4-nitrocyclohex-1-ene

E.e. = 100%

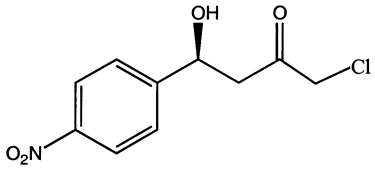
$[\alpha]_D = +16.5$ (*c* 0.54, $CHCl_3$)

Source of chirality: chiral precursor

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

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*



(4*S*)-1-Chloro-4-hydroxy-4-(4-nitrophenyl)butan-2-one

E.e. >99%

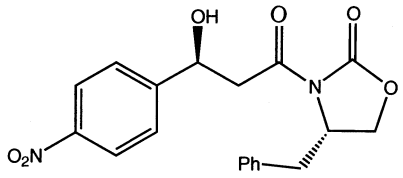
$[\alpha]_D^{25} = -30.4$ (*c* 0.5, DCM)

Source of chirality: chiral starting material

Absolute configuration: 4*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

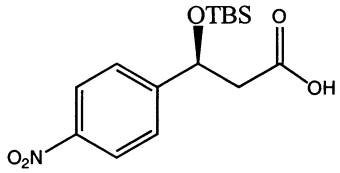


(3′*S*,4*S*)-4-Benzyl-3-[3′-hydroxy-3′-(4-nitrophenyl)propionyl]oxazolidin-2-one

E.e. >99%
$[\alpha]_D^{25}$ = +29.5 (*c* 1, DCM)
Source of chirality: (*S*)-4-benzyloxazolidin-2-one
Absolute configuration: 3′*S*,4*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

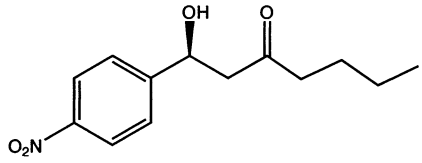


(3*S*)-3-(*tert*-Butyldimethylsilanyloxy)-3-(4-nitrophenyl)propionic acid

E.e. >99%
$[\alpha]_D^{25}$ = −49.8 (*c* 1, DCM)
Source of chirality: chiral starting material
Absolute configuration: 3*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

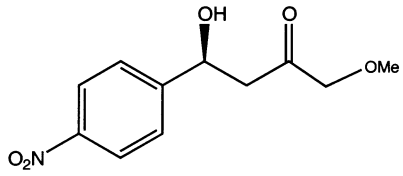


(1*S*)-1-Hydroxy-1-(4-nitrophenyl)heptan-3-one

E.e. >99%
$[\alpha]_D^{25}$ = −55.3 (*c* 1, DCM)
Source of chirality: chiral starting material
Absolute configuration: 1*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

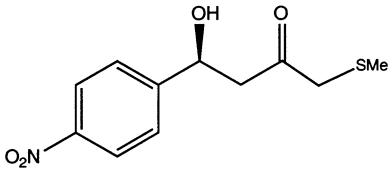


(4*S*)-4-Hydroxy-1-methoxy-4-(4-nitrophenyl)butan-2-one

E.e. >99%
$[\alpha]_D^{25}$ = −37.5 (*c* 0.5, DCM)
Source of chirality: chiral starting material
Absolute configuration: 4*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

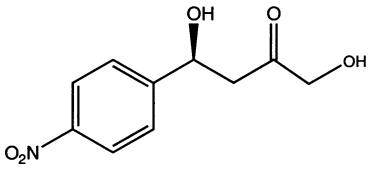


(4*S*)-4-Hydroxy-1-methylsulfanyl-4-(4-nitrophenyl)butan-2-one

E.e. >99%
$[\alpha]_D^{25} = -32.2$ (*c* 1, DCM)
Source of chirality: chiral starting material
Absolute configuration: 4*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

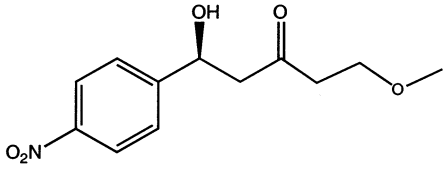


(4*S*)-1,4-Dihydroxy-4-(4-nitrophenyl)butan-2-one

E.e. >99%
$[\alpha]_D^{25} = -38.7$ (*c* 0.5, DCM)
Source of chirality: chiral starting material
Absolute configuration: 4*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

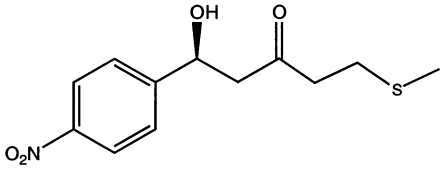


(1*S*)-1-Hydroxy-5-methoxy-1-(4-nitrophenyl)pentan-3-one

E.e. >99%
$[\alpha]_D^{25} = -42.6$ (*c* 1, DCM)
Source of chirality: chiral starting material
Absolute configuration: 1*S*

V. Maggiotti, J.-B. Wong, R. Razet, A. R. Cowley and V. Gouverneur*

Tetrahedron: Asymmetry *13 (2002) 1789*

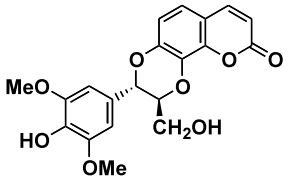


(1*S*)-1-Hydroxy-5-methylsulfanyl-1-(4-nitrophenyl)pentan-3-one

E.e. >99%
$[\alpha]_D^{25} = -47.2$ (*c* 1, DCM)
Source of chirality: chiral starting material
Absolute configuration: 1*S*

Xinfeng Ren, Xiaochuan Chen, Kun Peng, Xingang Xie, Yamu Xia and Xinfu Pan*

Tetrahedron: Asymmetry *13 (2002) 1799*



$C_{20}H_{18}O_8$

(2*S*,3*S*)-Daphneticin

E.e. = 92%

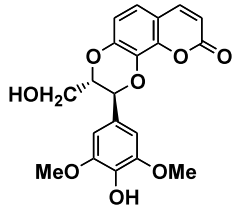
$[\alpha]_D = +11$ (*c* 1.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Xinfeng Ren, Xiaochuan Chen, Kun Peng, Xingang Xie, Yamu Xia and Xinfu Pan*

Tetrahedron: Asymmetry *13 (2002) 1799*



$C_{20}H_{18}O_8$

(2*S*,3*S*)-Regioisomer of daphneticin

E.e. = 92%

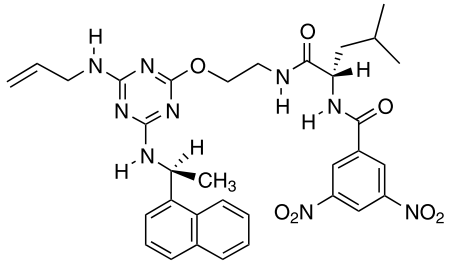
$[\alpha]_D = -8$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Anna Iuliano, Emanuele Attolino and Piero Salvadori*

Tetrahedron: Asymmetry *13 (2002) 1805*



$C_{33}H_{37}N_9O_7$

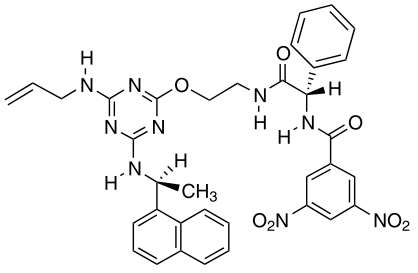
(S)-*N*-(3,5-Dinitrobenzoyl)amino-*iso*-butylacetyl]-2-{[4-allylamino-6-(*R*)-(1-(1-naphthyl)ethylamino)-1,3,5-triazin-2-yl]oxy}ethylamine

$[\alpha]_D^{24} = -26$ (*c* 1, CH_2Cl_2)

Source of chirality: natural and synthetic

Anna Iuliano, Emanuele Attolino and Piero Salvadori*

Tetrahedron: Asymmetry *13 (2002) 1805*



$C_{35}H_{33}N_9O_7$

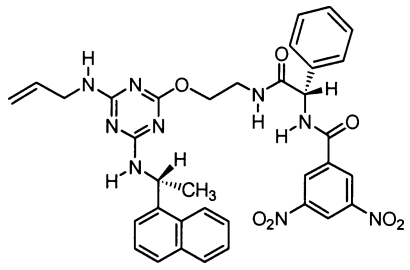
(*S*)-*N*-(3,5-Dinitrobenzoyl)amino-phenylacetyl]-2-{[4-allylamino-6-(*S*)-(1-(1-naphthyl)ethylamino)-1,3,5-triazin-2-yl]oxy}ethylamine

$[\alpha]_D^{22} = +60$ (*c* 0.92, CH_2Cl_2)

Source of chirality: natural and synthetic

Anna Iuliano, Emanuele Attolino and Piero Salvadori*

Tetrahedron: Asymmetry *13 (2002) 1805*



$C_{35}H_{33}N_9O_7$

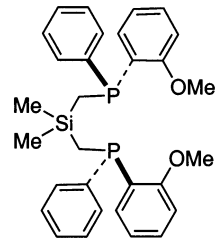
(S)-*N*-(3,5-Dinitrobenzoyl)amino-phenylacetyl]-2-{[4-allylamino-6-(*R*)-(1-(1-naphthyl)ethylamino)-1,3,5-triazin-2-yl]oxy}ethylamine

$[\alpha]_D^{22} = -5.4$ (*c* 0.8, CH_2Cl_2)

Source of chirality: natural and synthetic

Francesca Maienza, Francesco Santoro, Felix Spindler, Christophe Malan and Antonio Mezzetti*

Tetrahedron: Asymmetry *13 (2002) 1817*



$C_{30}H_{34}O_2P_2Si$

(*R*,*R*)-(+)-2,2-Dimethyl-2-sila-1,3-bis(*o*-anisylphenylphosphino)propane

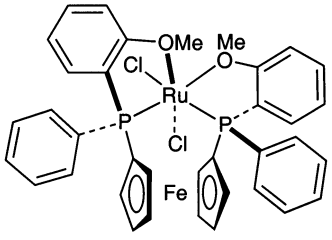
$[\alpha]_D^{20} = 156$ (*c* 1, $CHCl_3$)

Source of chirality: stereoselective synthesis

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

Francesca Maienza, Francesco Santoro, Felix Spindler, Christophe Malan and Antonio Mezzetti*

Tetrahedron: Asymmetry *13 (2002) 1817*



$C_{36}H_{32}Cl_2FeO_2P_2$

Dichloro-((*S*,*S*)-(1,1′-bis(*o*-anisylphenylphosphino)ferrocene)ruthenium(II)

$[\alpha]_D^{20} = +81.2$ (*c* 0.25, $CHCl_3$)

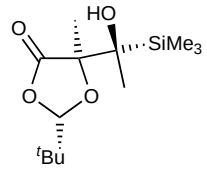
Source of chirality: stereoselective synthesis

Absolute configuration: (*OC*-6-32-*C*)-(S_p,S_p)

(the absolute configuration at ruthenium is based on molecular modelling calculations)

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro, Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva

Tetrahedron: Asymmetry *13 (2002) 1825*



$C_{13}H_{26}O_4Si$

2-*tert*-Butyl-5-(1-hydroxy-1-trimethylsilanylethyl)-2-methyl-[1,3]dioxolan-4-one

E.e. = 94%

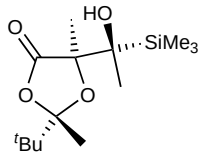
$[\alpha]_D^{20} = +33.9$ (*c* 1.72, $CHCl_3$)

Source of chirality: (2*S*,5*S*)-2-*tert*-butyl-2-methyl-[1,3]dioxolan-4-one [2*S*:2*R* = 97:3]

Absolute configuration: 2*S*,5*R*,1′*R*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro,
Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva

Tetrahedron: Asymmetry *13 (2002) 1825*



$C_{14}H_{28}O_4Si$

2-*tert*-Butyl-5-(1-hydroxy-1-trimethylsilanylethyl)-2,5-dimethyl-[1,3]dioxolan-4-one

E.e. = 86%

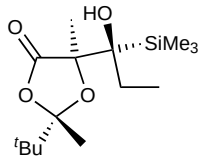
$[\alpha]_D^{20} = +17.6$ (*c* 1.14, $CHCl_3$)

Source of chirality: (2*S*,5*S*)-2-*tert*-butyl-2,5-dimethyl-[1,3]dioxolan-4-one [2*S*:2*R* = 93:7]

Absolute configuration: 2*S*,5*R*,1′*R*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro,
Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva

Tetrahedron: Asymmetry *13 (2002) 1825*



$C_{15}H_{30}O_4Si$

2-*tert*-Butyl-5-(1-hydroxy-1-trimethylsilanylpropyl)-2,5-dimethyl-[1,3]dioxolan-4-one

E.e. = 86%

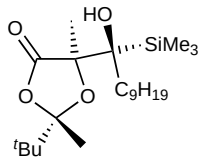
$[\alpha]_D^{20} = +17.2$ (*c* 1.28, $CHCl_3$)

Source of chirality: (2*S*,5*S*)-2-*tert*-butyl-2,5-dimethyl-[1,3]dioxolan-4-one [2*S*:2*R* = 93:7]

Absolute configuration: 2*S*,5*R*,1′*R*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro,
Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva

Tetrahedron: Asymmetry *13 (2002) 1825*



$C_{22}H_{44}O_4Si$

2-*tert*-Butyl-5-(1-hydroxy-1-trimethylsilanyldecyl)-2,5-dimethyl-[1,3]dioxolan-4-one

E.e. = 86%

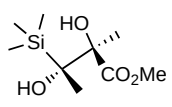
$[\alpha]_D^{20} = +13.9$ (*c* 0.95, $CHCl_3$)

Source of chirality: (2*S*,5*S*)-2-*tert*-butyl-2,5-dimethyl-[1,3]dioxolan-4-one [2*S*:2*R* = 93:7]

Absolute configuration: 2*S*,5*R*,1′*R*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro,
Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva

Tetrahedron: Asymmetry *13 (2002) 1825*



$C_9H_{20}O_4Si$

2,3-Dihydroxy-2-methyl-3-trimethylsilanyl-butyric acid methyl ester

E.e. = 94%

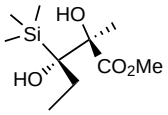
$[\alpha]_D^{20} = -8.75$ (*c* 1.0, $CHCl_3$)

Source of chirality: (2*S*,5*R*,1′*R*)-2-*tert*-butyl-5-(1-hydroxy-1-trimethylsilanyl-ethyl)-2-methyl-[1,3]-dioxolan-4-one [E.e. = 94%]

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

Tetrahedron: Asymmetry *13 (2002) 1825*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro, Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva



$C_{10}H_{22}O_4Si$

2,3-Dihydroxy-2-methyl-3-trimethylsilanyl-pentanoic acid methyl ester

E.e. = 86%

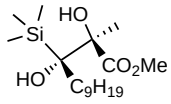
$[\alpha]_D^{20} = -13.1$ (*c* 2.47, $CHCl_3$)

Source of chirality: (2*S*,5*R*,1′*R*)-2-*tert*-butyl-5-(1-hydroxy-1-trimethylsilanyl-propyl)-2,5-dimethyl-[1,3]dioxolan-4-one [E.e. = 86%]

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

Tetrahedron: Asymmetry *13 (2002) 1825*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro, Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva



$C_{17}H_{36}O_4Si$

2,3-Dihydroxy-2-methyl-3-trimethylsilanyl-dodecanoic acid methyl ester

E.e. = 86%

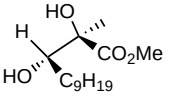
$[\alpha]_D^{20} = -9.6$ (*c* 0.60, $CHCl_3$)

Source of chirality: 2-*tert*-butyl-5-(1-hydroxy-1-trimethylsilanyl-decyl)-2,5-dimethyl-[1,3]dioxolan-4-one [E.e. = 86%]

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

Tetrahedron: Asymmetry *13 (2002) 1825*

Arturo Battaglia,* Eleonora Baldelli, Gaetano Barbaro, Patrizia Giorgianni, Andrea Guerrini, Magda Monari and Simona Selva



$C_{14}H_{28}O_4Si$

2,3-Dihydroxy-2-methyl-dodecanoic acid methyl ester

E.e. = 86%

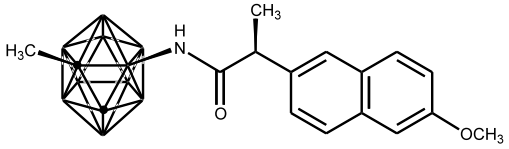
$[\alpha]_D^{20} = -25.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: (2*S*,5*R*,1′*R*)-2-*tert*-butyl-5-(1-hydroxy-1-trimethylsilanyl-decyl)-2,5-dimethyl-[1,3]-dioxolan-4-one [E.e. = 86%]

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

Tetrahedron: Asymmetry *13 (2002) 1833*

Victor P. Krasnov,* Galina L. Levit, Valery N. Charushin, Alexander N. Grishakov, Mikhail I. Kodess, Valery N. Kalinin, Valentina A. Ol'shevskaya and Oleg N. Chupakhin



$C_{17}H_{27}B_{10}NO_2$

3-{*N*-[(2*S*)-2-(6-Methoxynaphthyl-2)propionyl]}-amino-1-methyl-1,2-dicarba-*closo*-dodecaborane

D.e. = 93.7% (by HPLC)

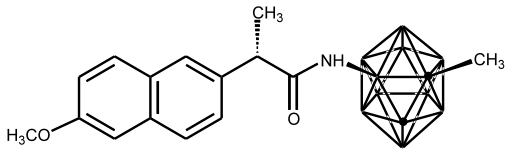
$[\alpha]_D^{20} = +37$ (*c* 1, benzene)

Source of chirality: resolution of racemate

Absolute configuration: 2*S*

Victor P. Krasnov,* Galina L. Levit, Valery N. Charushin, Alexander N. Grishakov, Mikhail I. Kodess, Valery N. Kalinin, Valentina A. Ol'shevskaya and Oleg N. Chupakhin

Tetrahedron: Asymmetry *13 (2002) 1833*



D.e. = 98.0% (by HPLC)

$[\alpha]_D^{20} = +116$ (*c* 1, benzene)

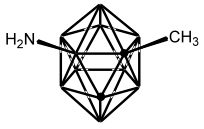
Source of chirality: resolution of racemate

$C_{17}H_{27}B_{10}NO_2$

3-{*N*-[(2*S*)-2-(6-Methoxynaphthyl-2)propionyl]}-amino-1-methyl-1,2-dicarba-*closo*-dodecaborane

Victor P. Krasnov,* Galina L. Levit, Valery N. Charushin, Alexander N. Grishakov, Mikhail I. Kodess, Valery N. Kalinin, Valentina A. Ol'shevskaya and Oleg N. Chupakhin

Tetrahedron: Asymmetry *13 (2002) 1833*



E.e. = 83.0% (by HPLC, derivatization with (*S*)-naproxen chloride)

$[\alpha]_D^{20} = -9.3$ (*c* 1, EtOH)

Source of chirality: resolution of racemate

$C_3H_{15}B_{10}N$

(−)-3-Amino-1-methyl-1,2-dicarba-*closo*-dodecaborane