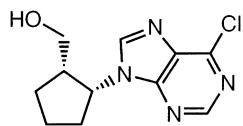


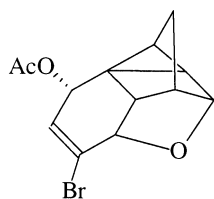
Elias Quezada, Lourdes Santana and Eugenio Uriarte*

Tetrahedron: Asymmetry 12 (2001) 2637C₁₁H₁₃ClN₄O*cis*-6-Chloro-9-[2-(hydroxymethyl)cyclopentyl]-9*H*-purine[α]_D = -38.5 (c 0.002, MeOH)

Source of chirality: resolution

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

Fernando D. P. Morisso and Valentim E. U. Costa*

Tetrahedron: Asymmetry 12 (2001) 2641C₁₃H₁₃BrO₃(-)-3-*endo*-Acetoxy-5-bromo-12-oxa-pentacyclo[6.2.1.1^{6,9}.0^{2,7}.0^{2,10}]dodeca-4-ene

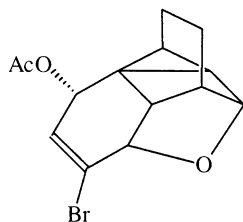
E.e. >99% (by chiral GC)

[α]₃₆₅²⁰ = -190 (c 0.5, ethyl acetate)

Source of chirality: enzyme-catalyzed transesterification of racemic mixture

Absolute configuration: unknown

Fernando D. P. Morisso and Valentim E. U. Costa*

Tetrahedron: Asymmetry 12 (2001) 2641C₁₂H₁₃BrO₂(-)-3-*endo*-Acetoxy-5-bromo-13-oxa-pentacyclo[6.2.1.1^{6,9}.0^{2,7}.0^{2,10}]trideca-4-ene

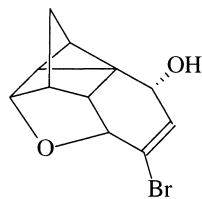
E.e. >99% (by chiral GC)

[α]₃₆₅²⁰ = -486 (c 0.5, ethyl acetate)

Source of chirality: enzyme-catalyzed transesterification of racemic mixture

Absolute configuration: unknown

Fernando D. P. Morisso and Valentim E. U. Costa*

Tetrahedron: Asymmetry 12 (2001) 2641C₁₁H₁₁BrO₂(-)-5-Bromo-12-oxa-pentacyclo[6.2.1.1^{6,9}.0^{2,7}.0^{2,10}]dodeca-4-ene-3-*endo*-ol

E.e. >99% (by chiral NMR and GC of the derived acetate (+)-5)

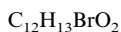
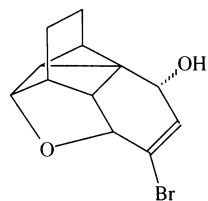
[α]₃₆₅²⁰ = +60 (c 0.5, ethyl acetate)

Source of chirality: enzyme-catalyzed transesterification of racemic mixture

Absolute configuration: unknown

Fernando D. P. Morisso and Valentim E. U. Costa*

Tetrahedron: Asymmetry 12 (2001) 2641



(+)-5-Bromo-13-oxa-pentacyclo[6.2.1.1^{6,9}.0^{2,7}.0^{2,10}]trideca-4-ene-3-endo-ol

E.e. >99% (by chiral GC)

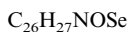
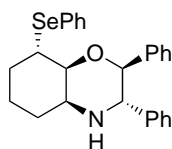
$[\alpha]_{365}^{20} = +140$ (c 0.5, ethyl acetate)

Source of chirality: enzyme-catalyzed transesterification of racemic mixture

Absolute configuration: unknown

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



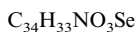
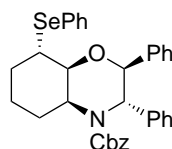
(2*S*,3*S*,8*S*,9*S*,10*S*)-2,3-Diphenyl-8-phenylselenenyloctahydrobenzo-1,4-oxazine

$[\alpha]_D = -32.6$ (c 0.54, CHCl₃)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



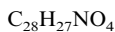
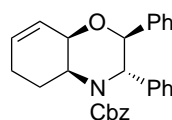
(2*S*,3*S*,8*S*,9*S*,10*S*)-4-Benzyloxycarbonyl-2,3-diphenyl-8-phenylselenenyloctahydrobenzo-1,4-oxazine

$[\alpha]_D = -39.6$ (c 0.56, CHCl₃)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



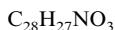
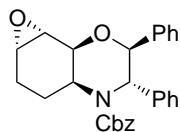
(2*S*,3*S*,9*R*,10*S*)-4-Benzyloxycarbonyl-2,3-diphenyl-2,3,5,6,9,10-hexahydrobenzo-1,4-oxazine

$[\alpha]_D = -16.9$ (c 0.52, CHCl₃)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



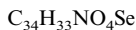
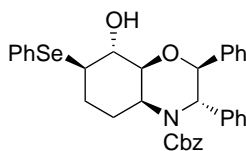
(5S,6S,8R,9S,10S,11S)-4-Benzyloxycarbonyl-5,6-diphenyloctahydro-1,7-dioxo-4-azacyclopropa[a]naphthalene

$[\alpha]_D = -14.4$ (c 0.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



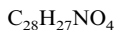
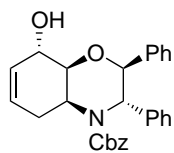
(2S,3S,7R,8R,9S,10S)-4-Benzyloxycarbonyl-8-hydroxy-2,3-diphenyl-7-phenylselenenyloctahydrobenzo-1,4-oxazine

$[\alpha]_D = -40.9$ (c 0.55, $CHCl_3$)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



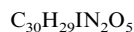
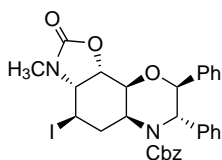
(2S,3S,8S,9S,10S)-4-Benzyloxycarbonyl-8-hydroxy-2,3-diphenyl-2,3,5,10,8,9-hexahydrobenzo-1,4-oxazine

$[\alpha]_D = -3.9$ (c 0.54, $CHCl_3$)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



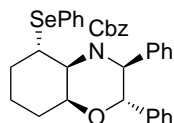
(4R,7S,8S,10S,11R,12S,13S)-6-Benzyloxycarbonyl-4-iodo-3-methyl-2-oxo-7,8-diphenyldecahydro-1,9-dioxo-3,6-diazacyclopenta[a]naphthalene

$[\alpha]_D = -3.3$ (c 0.51, $CHCl_3$)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



$C_{34}H_{33}NO_3Se$

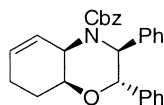
(2*S*,3*S*,5*S*,9*S*,10*S*)-4-Benzyloxycarbonyl-2,3-diphenyl-5-phenylselenenyloctahydrobenzo-1,4-oxazine

$[\alpha]_D = -49.6$ (*c* 1.20, $CHCl_3$)

Source of chirality: asymmetric synthesis

Kwan Soo Kim,* Sung Ook Choi, Jong Myun Park, Yong Joo Lee and Jin Hwan Kim

Tetrahedron: Asymmetry 12 (2001) 2649



$C_{28}H_{27}NO_3$

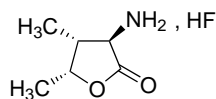
(2*S*,3*S*,9*S*,10*R*)-4-Benzyloxycarbonyl-2,3-diphenyl-2,3;7,8;9,10-hexahydrobenzo-1,4-oxazine

$[\alpha]_D = -141.0$ (*c* 0.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Tarek Kassem, Jonhy Wehbe, Valérie Rolland-Fulcrand, Marc Rolland, Marie-Louise Roumestant* and Jean Martinez

Tetrahedron: Asymmetry 12 (2001) 2657



$C_6H_{12}FNO_2$

(3*R*,4*R*,5*R*)-4-Hydroxy isoleucine lactone

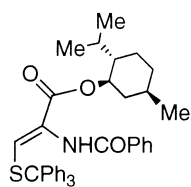
E.e. = 99±1%

$[\alpha]_D^{20} = +51.2$ (*c* 0.43, MeOH)

Source of chirality: oxazinone derived from (1*R*,2*R*,5*R*)-2-hydroxypinan-3-one

Francesca Clerici, Maria Luisa Gelmi,* Donato Pocar and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 2663



$C_{39}H_{41}NO_3S$

(-)-Menthyl-2-benzoylamino-3-tritylsulfanylacrylate

Mp = 198°C (CH_2Cl_2/iPr_2O)

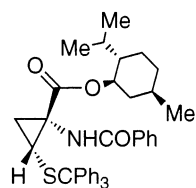
Ee = 100%

$[\alpha]_D^{25} = -88.6$ (*c* 5.2×10^{-3} , $CHCl_3$)

Source of chirality: asymmetric synthesis

Francesca Clerici, Maria Luisa Gelmi,* Donato Pocar and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 2663



$C_{40}H_{43}NO_3S$

(-)-Menthyl (1*R*,2*R*)-1-benzoylamino-2-tritylsulfanyl-cyclopropylcarboxylate

Mp = 179°C (CH₂Cl₂/*i*Pr₂O)

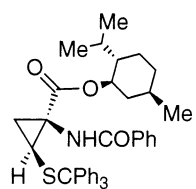
De = 100%

$[\alpha]_D^{25} = +152$ (*c* 2.8 × 10⁻³, CHCl₃)

Source of chirality: asymmetric synthesis

Francesca Clerici, Maria Luisa Gelmi,* Donato Pocar and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 2663



$C_{40}H_{43}N_3O_3S$

(-)-Menthyl (1*S*,2*S*)-1-benzoylamino-2-tritylsulfanyl-cyclopropylcarboxylate

Mp = 205°C (CH₂Cl₂/*i*Pr₂O)

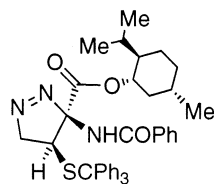
De = 100%

$[\alpha]_D^{25} = -235$ (*c* 2.8 × 10⁻³, CHCl₃)

Source of chirality: asymmetric synthesis

Francesca Clerici, Maria Luisa Gelmi,* Donato Pocar and Tullio Pilati

Tetrahedron: Asymmetry 12 (2001) 2663



$C_{40}H_{43}N_3O_3S$

(-)-Menthyl (3*R*,4*S*)-3-benzoylamino-4-tritylsulfanyl-4,5-dihydro-3*H*-pyrazole-3-carboxylate

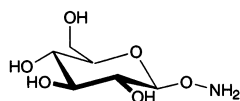
Oil

$[\alpha]_D^{25} = -125.4$ (*c* 2.1 × 10⁻³, CHCl₃)

Source of chirality: asymmetric synthesis

Henri Brunner,* Maximilian Schönherr and Manfred Zabel

Tetrahedron: Asymmetry 12 (2001) 2671



$C_6H_{13}NO_6$

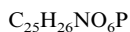
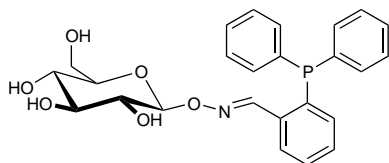
O-β-D-Glucopyranosylhydroxylamine

$[\alpha]_D^{25} = -40.0$ (*c* 1, H₂O)

Source of chirality: homochiral starting material

Henri Brunner,* Maximilian Schönherr and Manfred Zabel

Tetrahedron: Asymmetry 12 (2001) 2671



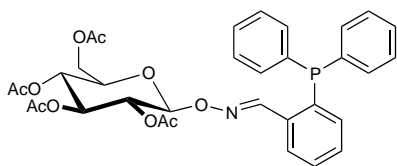
O-(β -D-Glucopyranosyl)-2-diphenylphosphanylbenzaldoxime

$[\alpha]_D^{25} = -1.8$ (*c* 3, CH_2Cl_2)

Source of chirality: homochiral starting material

Henri Brunner,* Maximilian Schönherr and Manfred Zabel

Tetrahedron: Asymmetry 12 (2001) 2671



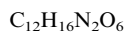
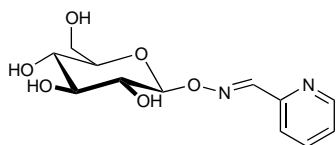
O-(2,3,4,6-Tetra-*O*-acetyl- β -D-glucopyranosyl)-2-diphenylphosphanylbenzaldoxime

$[\alpha]_D^{25} = -17.3$ (*c* 3, CH_2Cl_2)

Source of chirality: homochiral starting material

Henri Brunner,* Maximilian Schönherr and Manfred Zabel

Tetrahedron: Asymmetry 12 (2001) 2671



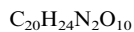
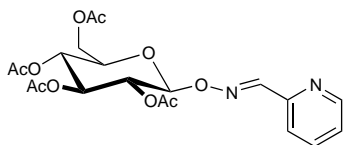
O-(β -D-Glucopyranosyl)pyridine-2-carbaldoxime

$[\alpha]_D^{25} = -16.3$ (*c* 2, CH_3OH)

Source of chirality: homochiral starting material

Henri Brunner,* Maximilian Schönherr and Manfred Zabel

Tetrahedron: Asymmetry 12 (2001) 2671



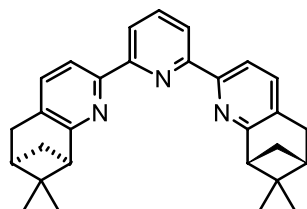
O-(2,3,4,6-Tetra-*O*-acetyl- β -D-glucopyranosyl)pyridine-2-carbaldoxime

$[\alpha]_D^{25} = -22.0$ (*c* 2, CH_2Cl_2)

Source of chirality: homochiral starting material

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

Tetrahedron: Asymmetry 12 (2001) 2683



2,6-Bis(7,7-dimethyl-5,6,7,8-tetrahydro-6,8-methanoquinolin-2-yl)pyridine

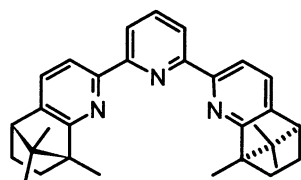
$[\alpha]_D^{25} = -49.4$ ($c=0.50$, CH_2Cl_2)

Source of chirality: (1*R*)-(+)-nopinone

Absolute configuration: 6*R*,8*R*

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

Tetrahedron: Asymmetry 12 (2001) 2683



2,6-Bis(8,9,9-trimethyl-5,6,7,8-tetrahydro-5,8-methanoquinolin-2-yl)pyridine

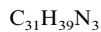
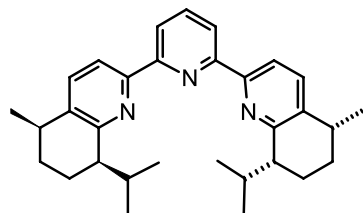
$[\alpha]_D^{25} = -15.8$ ($c=0.53$, CH_2Cl_2)

Source of chirality: (1*R*)-(+)-camphor

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

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

Tetrahedron: Asymmetry 12 (2001) 2683



2,6-Bis(5-methyl-8-isopropyl-5,6,7,8-tetrahydroquinolin-2-yl)pyridine

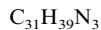
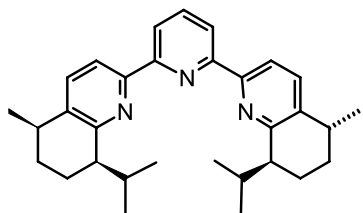
$[\alpha]_D^{25} = -58.8$ ($c=0.50$, CH_2Cl_2), mp 155–158°C

Source of chirality: (-)-menthone

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

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

Tetrahedron: Asymmetry 12 (2001) 2683



2,6-Bis(5-methyl-8-isopropyl-5,6,7,8-octahydroquinolin-2-yl)-pyridine

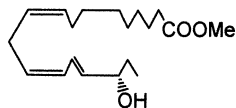
$[\alpha]_D^{25} = -49.0$ ($c=0.53$, CH_2Cl_2), mp 124–125°C

Source of chirality: (-)-menthone

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

Tadahiro Kato,* Toshio Nakai, Rumiko Ishikawa, Aya Karasawa and Tsuneo Namai

Tetrahedron: Asymmetry 12 (2001) 2695



C₁₉H₃₂O₃

(16*S*)-Hydroxy- α -linolenic acid methyl ester

E.e. = 97% (by NMR of MTPA ester of related bromohydrin of α -linolenic acid methyl ester)

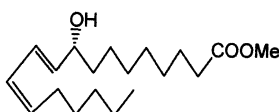
$[\alpha]_D^{27} = +19$ (*c* 0.5, CHCl₃)

Source of chirality: resolution with Lipase PS of (\pm)-bromohydrin of α -linolenic acid methyl ester

Absolute configuration: 16*S* (assigned by Kusumi-Mosher method)

Tadahiro Kato,* Toshio Nakai, Rumiko Ishikawa, Aya Karasawa and Tsuneo Namai

Tetrahedron: Asymmetry 12 (2001) 2695



C₁₉H₃₄O₃

(9*R*)-Hydroxylinoleic acid methyl ester

E.e. >98% (by chiral HPLC of benzoate)

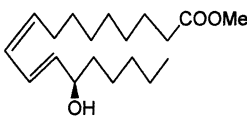
$[\alpha]_D^{29} = -8.4$ (*c* 0.5, CHCl₃)

Source of chirality: partial resolution of DL-alcohol followed by chiral HPLC separation of the benzoate

Absolute configuration: 9*R* (assigned by optical rotation of the benzoate)

Tadahiro Kato,* Toshio Nakai, Rumiko Ishikawa, Aya Karasawa and Tsuneo Namai

Tetrahedron: Asymmetry 12 (2001) 2695



C₁₉H₃₄O₃

(13*R*)-Hydroxylinoleic acid methyl ester

E.e. >98% (by chiral column of benzoate)

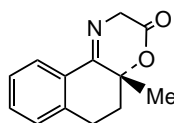
$[\alpha]_D^{30} = -8.6$ (*c* 0.5, CHCl₃)

Source of chirality: partial resolution of DL-alcohol followed by chiral HPLC separation of the benzoate

Absolute configuration: 13*R* (assigned by optical rotation of the benzoate)

A. Solladié-Cavallo,* O. Sedy, M. Salisova, M. Biba, C. J. Welch, L. Nafié and T. Freedman

Tetrahedron: Asymmetry 12 (2001) 2703



C₁₃H₁₃NO₂

(4a*R*)-4a-Methyl-2,4a,5,6-tetrahydro-3*H*-naphto[2,1-*b*][1,4]oxazin-2-one

E.e. >99%

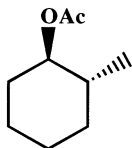
$[\alpha]_D^{20} = +298$ (*c* 1, CHCl₃)

Source of chirality: resolution via supercritical fluid chromatography on a semi-preparative Chiralpak AS column

Absolute configuration: *R* (using VCD method)

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₉H₁₆O₂

trans-2-Methylcyclohexanol acetate

Ee = 100% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

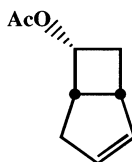
[α]_D²⁵ = -69 (c 0.64, EtOH)

Source of chirality: microbial hydrolysis

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₉H₁₂O₂

endo-Bicyclo[3.2.0]hept-2-en-6-ol acetate

Ee >95% [by GLC analysis on a 25 m dimethyl-*n*-pentyl-β-cyclodextrin in OV 1701]

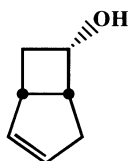
[α]_D²⁵ = 35 (c 2.27, CHCl₃)

Source of chirality: microbial hydrolysis

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₇H₁₀O

endo-Bicyclo[3.2.0]hept-2-en-6-ol

Ee = 67% [by GLC analysis on a 25 m dimethyl-*n*-pentyl-β-cyclodextrin in OV 1701]

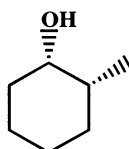
[α]_D²⁵ = 45 (c 1.1, CHCl₃)

Source of chirality: microbial hydrolysis

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₇H₁₄O

cis-2-Methylcyclohexanol

Ee = 100% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

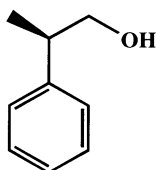
[α]_D²⁵ = 18 (c 1, MeOH)

Source of chirality: microbial hydrolysis and reduction

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₉H₁₂O
2-Phenylpropanol

Ee = 57% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

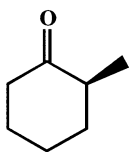
$\alpha_D^{25} = -9.7$ (neat)

Source of chirality: microbial hydrolysis and reduction

Absolute configuration: *S*

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₇H₁₂O
2-Methylcyclohexanone

Ee = 100% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

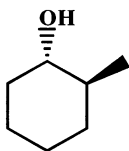
$[\alpha]_D^{25} = -14$ (*c* 0.23, MeOH)

Source of chirality: microbial hydrolysis

Absolute configuration: *S*

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₇H₁₄O
trans-2-Methylcyclohexanol

Ee = 39% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

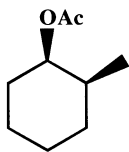
$[\alpha]_D^{25} = 14.9$ (*c* 9.6, EtOH)

Source of chirality: microbial hydrolysis

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₉H₁₆O₂
cis-2-Methylcyclohexanol acetate

Ee = 100% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl-β-cyclodextrin in OV 1701]

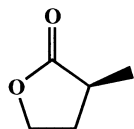
$[\alpha]_D^{25} = -37.4$ (*c* 1.50, CHCl₃)

Source of chirality: microbial hydrolysis

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

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₅H₈O₂

α -Methyl- γ -butyrolactone

Ee = 40% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl- β -cyclodextrin in OV 1701]

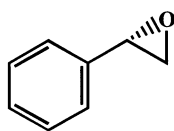
$[\alpha]_D^{25} = -8.9$ (*c* 6.5, EtOH)

Source of chirality: microbial hydrolysis

Absolute configuration: *S*

Giancarlo Fantin, Marco Fogagnolo, Alessandra Guerrini,
Alessandro Medici,* Paola Pedrini and Silvia Fontana

Tetrahedron: Asymmetry 12 (2001) 2709



C₈H₈O

Styrene oxide

Ee = 52% [by GLC analysis on a 25 m diethyl-*tert*-butylsilyl- β -cyclodextrin in OV 1701]

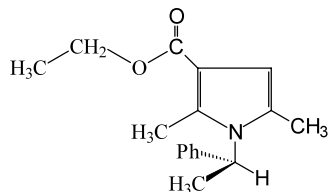
$\alpha_D^{25} = 17.1$ (neat)

Source of chirality: microbial hydrolysis

Absolute configuration: *R*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and
Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



C₁₇H₂₁NO₂

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)pentanedioic acid diethyl ester

E.e. = 98%

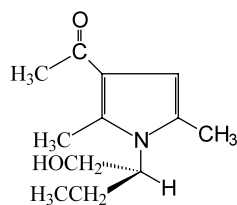
$[\alpha]_D^{20} = -35.8$ (*c* 0.4, CHCl₃)

Source of chirality: (*S*)-1-phenylethylamine as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and
Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



C₁₂H₁₉NO₂

(*S*)-1-[1-(Hydroxymethylpropyl)-2,5-dimethyl-1*H*-pyrrol-3-yl]ethanone

E.e. = 98%

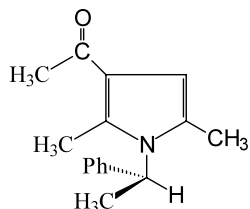
$[\alpha]_D^{20} = -16.4$ (*c* 0.7, CHCl₃)

Source of chirality: (*S*)-2-amino-1-butanol as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{16}H_{19}NO$

(*S*)-1-[2,5-Dimethyl-1-(1-phenylethyl)-1*H*-pyrrol-3-yl]ethanone

E.e. = 99%

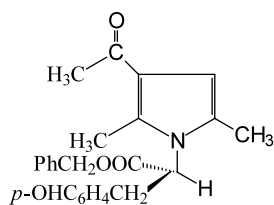
$[\alpha]_D^{20} = -12.8$ (*c* 0.6, $CHCl_3$)

Source of chirality: (*S*)-1-phenylethylamine as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{24}H_{25}NO_4$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)-3-(4-hydroxyphenyl)propionic acid phenyl ester

E.e. = 98%

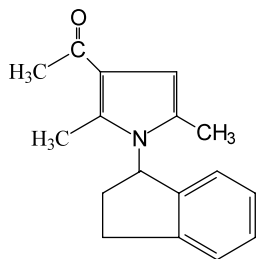
$[\alpha]_D^{20} = -101.7$ (*c* 0.6, $CHCl_3$)

Source of chirality: L-tyrosine benzyl ester *p*-toluene-sulfonate salt as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{17}H_{19}NO$

(*R*)-1-(1-Indan-1-yl-2,5-dimethyl-1*H*-pyrrol-3-yl)ethanone

E.e. = 98%

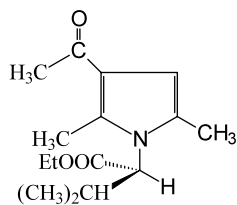
$[\alpha]_D^{20} = -1.5$ (*c* 0.9, $CHCl_3$)

Source of chirality: (*R*)-1-aminoindane as starting material

Absolute configuration: *R*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{15}H_{23}NO_3$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)-3-methylbutyric acid ethyl ester

E.e. = 99%

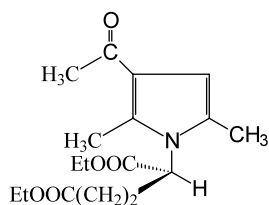
$[\alpha]_D^{20} = -108.7$ (*c* 0.6, $CHCl_3$)

Source of chirality: L-valine ethyl ester hydrochloride as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{17}H_{25}NO_5$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)pentanedioic acid diethyl ester

E.e. = 96%

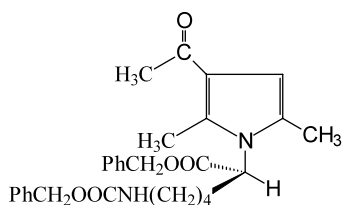
$[\alpha]_D^{20} = -60.2$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-glutamic acid diethyl ester hydrochloride as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{29}H_{34}N_2O_5$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)-6-phenoxycarbonylaminohexanoic acid benzyl ester

E.e. = 99%

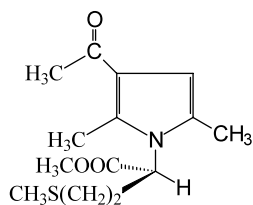
$[\alpha]_D^{20} = -29.1$ (*c* 0.9, $CHCl_3$)

Source of chirality: *N*_ε-CBZ-L-lysine benzyl ester hydrochloride as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{14}H_{21}NO_3S$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)-4-methylsulfanylbutyric acid methyl ester

E.e. = 96%

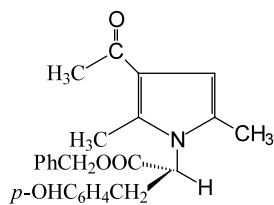
$[\alpha]_D^{20} = -77.7$ (*c* 0.4, $CHCl_3$)

Source of chirality: L-methionine methyl ester hydrochloride as starting material

Absolute configuration: *S*

Antonio Arcadi,* Sabrina Di Giuseppe, Fabio Marinelli and Elisabetta Rossi

Tetrahedron: Asymmetry 12 (2001) 2715



$C_{24}H_{25}NO_4$

(*S*)-2-(3-Acetyl-2,5-dimethylpyrrol-1-yl)-3-(4-hydroxyphenyl)propionic acid phenyl ester

E.e. = 98%

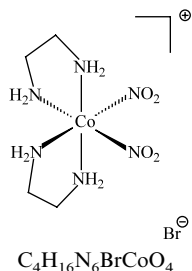
$[\alpha]_D^{20} = -101.7$ (*c* 0.6, $CHCl_3$)

Source of chirality: L-tyrosine benzyl ester *p*-toluene-sulfonate salt as starting material

Absolute configuration: *S*

Remir G. Kostyanovsky,* Vladimir Yu. Torbeev and Konstantin A. Lyssenko

Tetrahedron: Asymmetry 12 (2001) 2721



$\Lambda(-)_{589}$ -*cis*-bis(ethylenediamine)dinitrocobalt bromide

E.e. = 56%

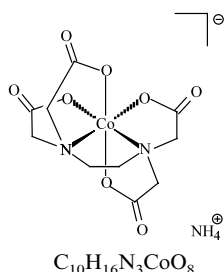
$[\alpha]_{589}^{23} = -24.6$ (*c* 1, H₂O)

Source of chirality: spontaneous resolution

Absolute configuration: $\Lambda(-)_{589}$

Remir G. Kostyanovsky,* Vladimir Yu. Torbeev and Konstantin A. Lyssenko

Tetrahedron: Asymmetry 12 (2001) 2721



Ammonium $\Lambda(-)_{546}$ -ethylenediaminetetraacetatocobaltate

E.e. = 83%

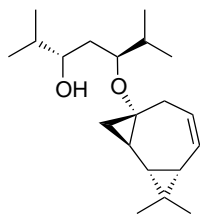
$[\alpha]_{546}^{25} = -1250.9$ (*c* 0.02, H₂O)

Source of chirality: spontaneous resolution

Absolute configuration: $\Lambda(-)_{546}$

Takahiro Tei, Takashi Sugimura,* Toshifumi Katagiri, Akira Tai and Tadashi Okuyama

Tetrahedron: Asymmetry 12 (2001) 2727



9,9-Dimethyl-4-(2,6-dimethyl-5-hydroxyheptyl-3-oxy)tricyclo[6.1.0.0^{2,4}]non-6-ene

E.e. >99%

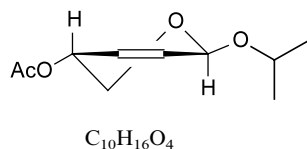
$[\alpha]_D^{20} = -29.3$ (*c* 1.2, methanol)

Source of chirality: (3*S*,5*S*)-2,6-dimethyl-3,5-heptane-diol

Absolute configuration: 1*S*,2*R*,4*R*,8*S*

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -D-4-*O*-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

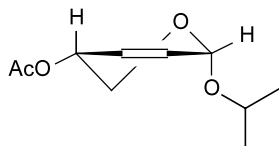
$[\alpha]_D +120.4$ (*c* 0.5, CHCl₃)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -D-4-O-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

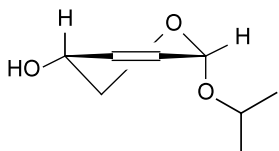
$[\alpha]_D +97.1$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -D-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

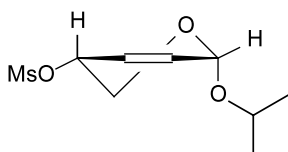
$[\alpha]_D +37.9$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -D-4-O-methanesulfonyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

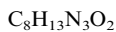
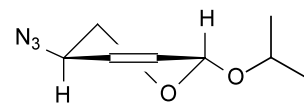
$[\alpha]_D +98.2$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -L-4-azido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

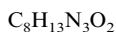
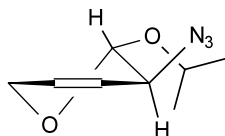
$[\alpha]_D -53.6$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -2-azido-2,3,4-trideoxypent-3-enopyranoside

Ee >99%

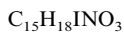
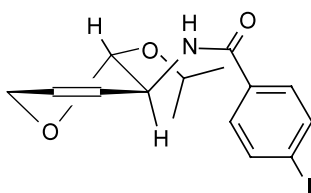
$[\alpha]_D -71.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,2S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -2-(*p*-iodobenzamido)-2,3,4-trideoxypent-3-enopyranoside

Ee >99%

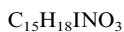
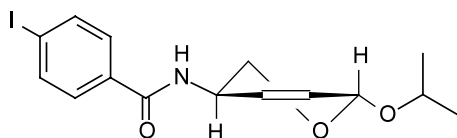
$[\alpha]_D -61.6$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,2S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl α -L-4-(*p*-iodobenzamido)-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

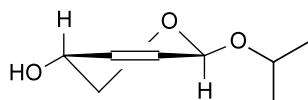
$[\alpha]_D -48.2$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -D-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

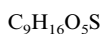
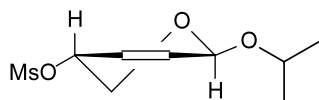
$[\alpha]_D +101.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -D-4-O-methanesulphonyl-2,3-dideoxypent-2-enoglycero pyranoside

Ee >99%

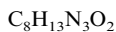
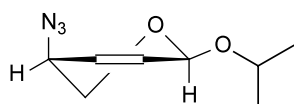
$[\alpha]_D +102.0$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -L-4-azido-2,3,4-trideoxypent-2-enoglycero pyranoside

Ee >99%

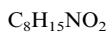
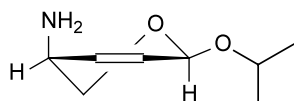
$[\alpha]_D -132.2$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -L-4-amino-2,3,4-trideoxypent-2-enoglycero pyranoside

Ee >99%

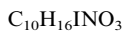
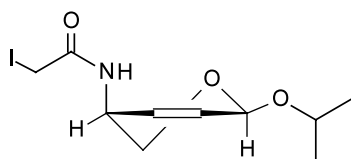
$[\alpha]_D -83.2$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Isopropyl β -L-4-iodoacetamido-2,3,4-trideoxypent-2-enoglycero pyranoside

Ee >99%

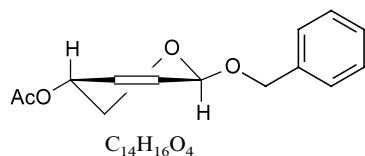
$[\alpha]_D -81.3$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731

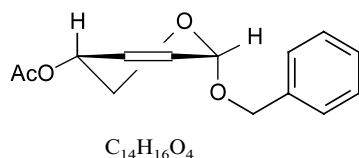


Benzyl β -D-4-O-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%
[α]_D +137.7 (c 0.5, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731

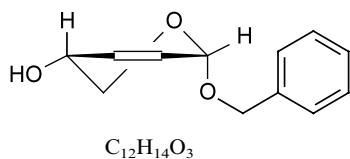


Benzyl α -D-4-O-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%
[α]_D +77.1 (c 0.5, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: 1S,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731

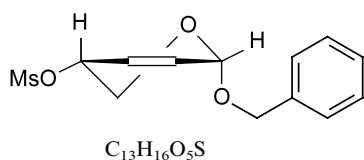


Benzyl α -D-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%
[α]_D +73.3 (c 0.5, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: 1S,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731

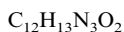
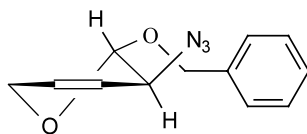


Benzyl α -D-4-O-methanesulphonyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%
[α]_D +84.2 (c 0.5, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: 1S,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl α -2-azido-2,3,4-trideoxypent-3-enopyranoside

Ee >99%

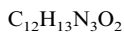
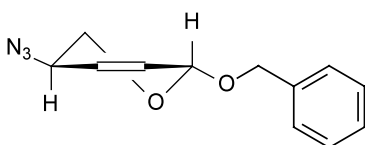
$[\alpha]_D +68.8$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl α -L-4-azido-2,3,4-trideoxypent-2-enoglycero pyranoside

Ee >99%

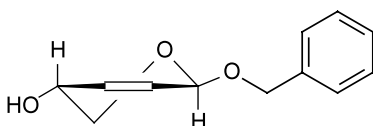
$[\alpha]_D -66.8$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl β -D-2,3-dideoxypent-2-enoglycero pyranoside

Ee >99%

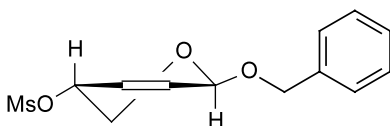
$[\alpha]_D +99.2$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl β -D-4-*O*-methanesulphonyl-2,3-dideoxypent-2-enoglycero pyranoside

Ee >99%

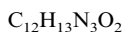
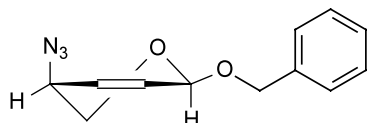
$[\alpha]_D +81.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl β -L-4-azido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

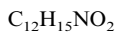
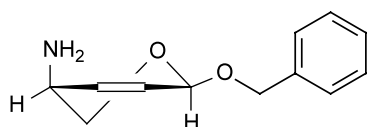
$[\alpha]_D -140.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl β -L-4-amino-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

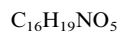
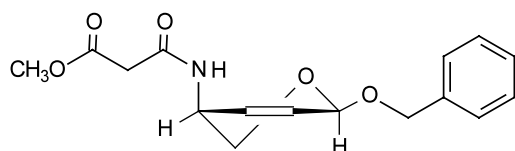
$[\alpha]_D -63.6$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



Benzyl β -L-4-methoxycarbonylacetamido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

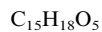
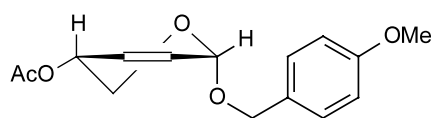
$[\alpha]_D -38.8$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl α -D-4-*O*-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

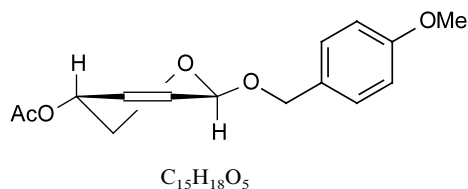
$[\alpha]_D +63.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -D-4-*O*-acetyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

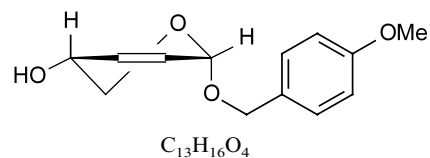
$[\alpha]_D +58.3$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl α -D-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

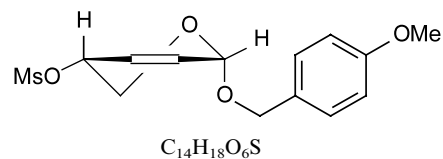
$[\alpha]_D +31.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl α -D-4-*O*-methanesulfonyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

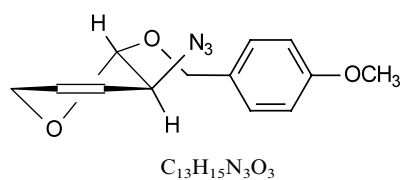
$[\alpha]_D +61.2$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl α -2-azido-2,3,4-trideoxypent-3-enopyranoside

Ee >99%

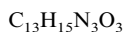
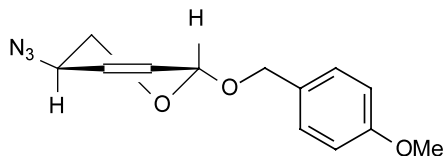
$[\alpha]_D +181.3$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl α -L-4-azido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

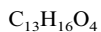
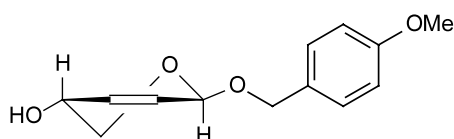
$[\alpha]_D -136.1$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1S,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -D-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

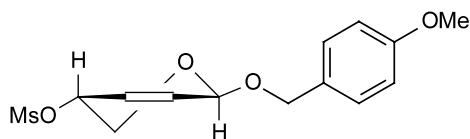
$[\alpha]_D +68.4$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -D-4-*O*-methanesulfonyl-2,3-dideoxypent-2-enoglyceropyranoside

Ee >99%

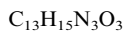
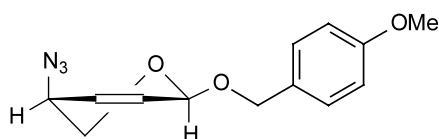
$[\alpha]_D +77.6$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4S

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -L-4-azido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

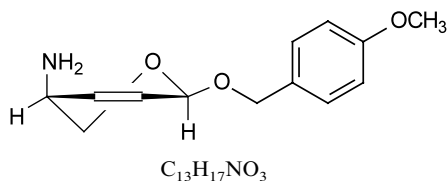
$[\alpha]_D -137.5$ (c 0.5, $CHCl_3$)

Source of chirality: D-xylose

Absolute configuration: 1R,4R

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -L-4-amino-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

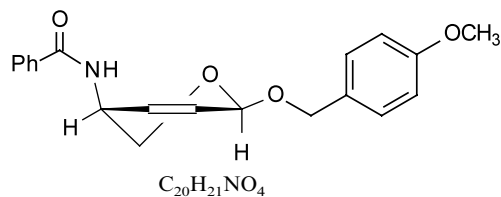
$[\alpha]_D +77.4$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 12 (2001) 2731



p-Methoxybenzyl β -L-4-benzamido-2,3,4-trideoxypent-2-enoglyceropyranoside

Ee >99%

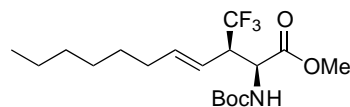
$[\alpha]_D -80.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-xylose

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

Tsutomu Konno,* Takeshi Daitoh, Takashi Ishihara
and Hiroki Yamanaka

Tetrahedron: Asymmetry 12 (2001) 2743



Methyl (2*S*,3*R*)-(E)-2-(*t*-butoxycarbonyl)-3-trifluoromethylundec-4-enoate

E.e. = 92%

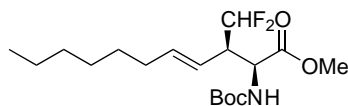
$[\alpha]_D^{22} = +12.5$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Tsutomu Konno,* Takeshi Daitoh, Takashi Ishihara
and Hiroki Yamanaka

Tetrahedron: Asymmetry 12 (2001) 2743



Methyl (2*S*,3*R*)-(E)-2-(*t*-butoxycarbonyl)-3-trifluoromethylundec-4-enoate

E.e. = 84%

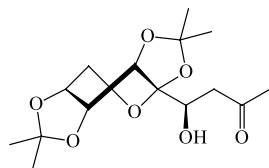
$[\alpha]_D^{22} = +5.3$ (*c* 1.1, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Isidoro Izquierdo,* María T. Plaza, Rafael Robles, Antonio J. Mota and Francisco Franco

Tetrahedron: Asymmetry 12 (2001) 2749



1,3-Dideoxy-5,6:7,8-di-*O*-isopropylidene- β -D-*manno*-non-2,5-diulo-5,9-pyranose

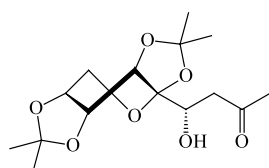
$[\alpha]_D +1.7$, $[\alpha]_{405} +12$ (*c* 1.2, chloroform)

Source of chirality: D-fructose and stereoselective synthesis

Absolute configuration: 4*R*,5*S*,6*S*,7*R*,8*R* (assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Rafael Robles, Antonio J. Mota and Francisco Franco

Tetrahedron: Asymmetry 12 (2001) 2749



1,3-Dideoxy-5,6:7,8-di-*O*-isopropylidene- β -D-*gluco*-non-2,5-diulo-5,9-pyranose

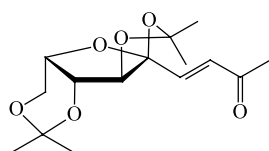
$[\alpha]_D -18$, $[\alpha]_{405} -32$ (*c* 1.7, chloroform)

Source of chirality: D-fructose and stereoselective synthesis

Absolute configuration: 4*S*,5*S*,6*S*,7*R*,8*R* (assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Rafael Robles, Antonio J. Mota and Francisco Franco

Tetrahedron: Asymmetry 12 (2001) 2749



(*E*)-1,3,4-Trideoxy-5,6:7,9-di-*O*-isopropylidene- α -L-*xylo*-non-3-ene-2,5-diulo-5,8-furanose

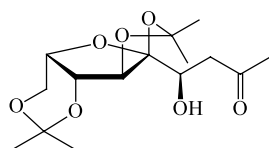
$[\alpha]_D^{26} +24$ (*c* 1, chloroform)

Source of chirality: L-sorbose and stereoselective synthesis

Absolute configuration: 3*E*,5*S*,6*S*,7*S*,8*S* (assigned by spectroscopic data)

Isidoro Izquierdo,* María T. Plaza, Rafael Robles, Antonio J. Mota and Francisco Franco

Tetrahedron: Asymmetry 12 (2001) 2749



1,3-Dideoxy-5,6:7,9-di-*O*-isopropylidene- α -L-*gulo*-non-2,5-diulo-5,8-furanose

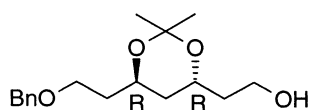
$[\alpha]_D^{27} +15$ (*c* 1.1, chloroform)

Source of chirality: L-sorbose and stereoselective synthesis

Absolute configuration: 4*R*,5*S*,6*S*,7*S*,8*S* (assigned by chemical correlation)

Carlo Bonini,* Lucia Chiumminto and Maria Funicello

Tetrahedron: Asymmetry 12 (2001) 2755



$C_{17}H_{28}O_4$

(-)-(3*R*,5*R*)-7-Benzyloxy-3,5-*O*-isopropylidene-heptane-1,3,5-triol

E.e. = 98%

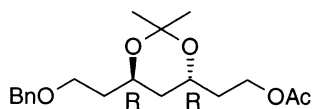
$[\alpha]_D = -9.1$ ($c=1.0$, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Carlo Bonini,* Lucia Chiumminto and Maria Funicello

Tetrahedron: Asymmetry 12 (2001) 2755



$C_{19}H_{30}O_5$

(+)-(3*R*,5*R*)-1-Acetoxy-7-benzyloxy-3,5-dihydroxy-3,5-*O*-isopropylidene-heptane

E.e. = 98%

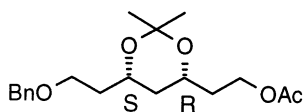
$[\alpha]_D = +1.5$ ($c=0.9$, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Carlo Bonini,* Lucia Chiumminto and Maria Funicello

Tetrahedron: Asymmetry 12 (2001) 2755



$C_{19}H_{30}O_5$

(-)-(3*R*,5*S*)-1-Acetoxy-7-benzyloxy-3,5-dihydroxy-3,5-*O*-isopropylidene-heptane

E.e. = 98%

$[\alpha]_D = -1.3$ ($c=1.1$, $CHCl_3$)

Source of chirality: enzymatic resolution

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