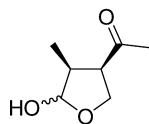


Stereochemistry abstracts

Cristina Forzato, Giada Furlan, Franco Ghelfi, Patrizia Nitti,*
Giuliana Pitacco, Fabrizio Roncaglia and Ennio Valentin*

Tetrahedron: Asymmetry 18 (2007) 447



(2*R*/2*S*,3*S*,4*R*)-4-Acetyl-2-hydroxy-3-methyltetrahydrofuran (botryodiplodin)

Ee = 90% (by chiral HRGC)

$[\alpha]_D^{25} = +56.5$ (*c* 0.55, MeOH)

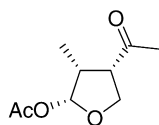
$\Delta\epsilon_{284} = +0.9$ (MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: (2*R*/2*S*,3*S*,4*R*)

Cristina Forzato, Giada Furlan, Franco Ghelfi, Patrizia Nitti,*
Giuliana Pitacco, Fabrizio Roncaglia and Ennio Valentin*

Tetrahedron: Asymmetry 18 (2007) 447



(2*R*,3*R*,4*S*)-4-Acetyl-2-acetoxy-3-methyltetrahydrofuran (botryodiplodin acetate)

Ee = 99% (by chiral HRGC)

$[\alpha]_D^{25} = +100$ (*c* 0.35, MeOH)

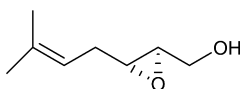
$\Delta\epsilon_{218} = -0.2$; $\Delta\epsilon_{283} = -0.4$ (MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: (2*R*,3*R*,4*S*)

Linglong Kong, Zeyang Zhuang, Qingshou Chen, Haibing Deng,
Zhiyong Tang, Xueshun Jia, Yulin Li and Hongbin Zhai*

Tetrahedron: Asymmetry 18 (2007) 451



(2*R*,3*R*)-2,3-Epoxy-6-methylhept-5-en-1-ol

Ee = 93.6% (assumed to be the same as that of its corresponding *O*-benzoate)

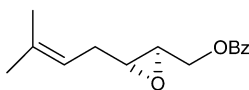
$[\alpha]_D^{27} = +19.15$ (*c* 2.25, $CHCl_3$)

Source of chirality: asymmetric epoxidation

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

Linglong Kong, Zeyang Zhuang, Qingshou Chen, Haibing Deng,
Zhiyong Tang, Xueshun Jia, Yulin Li and Hongbin Zhai*

Tetrahedron: Asymmetry 18 (2007) 451



((2*R*,3*R*)-3-(3-Methylbut-2-enyl)oxiran-2-yl)methyl benzoate

Ee = 93.6% [HPLC: Chiral Delta-S column, hexanes/2-propanol: 100/1, rate: 0.8 mL/min]

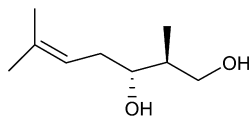
$[\alpha]_D^{23} = +20.63$ (*c* 1.45, $CHCl_3$)

Source of chirality: (2*R*,3*R*)-2,3-epoxy-6-methylhept-5-en-1-ol

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

Linglong Kong, Zeyang Zhuang, Qingshou Chen, Haibing Deng,
Zhiyong Tang, Xueshun Jia, Yulin Li and Hongbin Zhai*

Tetrahedron: Asymmetry 18 (2007) 451



(2*S*,3*R*)-2,6-Dimethylhept-5-ene-1,3-diol

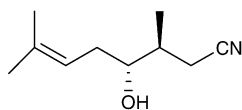
$$[\alpha]_D^{20} = +20.6 \text{ (} c \text{ 1.2, EtOH)}$$

Source of chirality: asymmetric synthesis

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

Linglong Kong, Zeyang Zhuang, Qingshou Chen, Haibing Deng,
Zhiyong Tang, Xueshun Jia, Yulin Li and Hongbin Zhai*

Tetrahedron: Asymmetry 18 (2007) 451



(3*S*,4*R*)-4-Hydroxy-3,7-dimethyloct-6-enenitrile

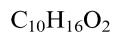
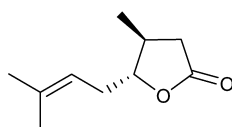
$$[\alpha]_D^{20} = -5.4 \text{ (} c \text{ 1.2, EtOH)}$$

Source of chirality: (2*S*,3*R*)-2,6-dimethylhept-5-ene-1,3-diol

Absolute configuration: (3*S*,4*R*)

Linglong Kong, Zeyang Zhuang, Qingshou Chen, Haibing Deng,
Zhiyong Tang, Xueshun Jia, Yulin Li and Hongbin Zhai*

Tetrahedron: Asymmetry 18 (2007) 451



(+)-Eldanolide

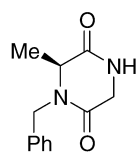
$$[\alpha]_D^{20} = +48.2 \text{ (} c \text{ 1.15, MeOH)}$$

Source of chirality: asymmetric synthesis

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

Jernej Waggener, Simona Golič Grdadolnik, Uroš Grošelj, Anton Meden,
Branko Stanovnik* and Jurij Svete*

Tetrahedron: Asymmetry 18 (2007) 464



(*S*)-1-Benzyl-6-methylpiperazine-2,5-dione

Ee = 100%

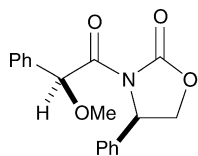
$$[\alpha]_D^{20} = +37.5 \text{ (} c \text{ 2.90, CHCl}_3)$$

Source of chirality: (*S*)-alanine methyl ester

Absolute configuration: (*S*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(4*R*,2*S*)-Phenyl-3-phenyl-2-methoxyacetyl-oxazolidin-2-one

Ee > 98%; De > 98%

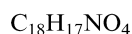
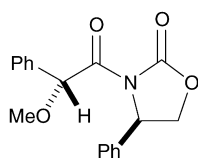
$[\alpha]_D^{20} = -14.4$ (c 0.22, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,2*S*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(4*R*,2*R*)-Phenyl-3-phenyl-2-methoxyacetyl-oxazolidin-2-one

Ee > 98%; De > 98%

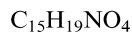
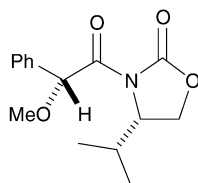
$[\alpha]_D^{20} = -194.7$ (c 0.72, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,2*R*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(4*S*,2*R*)-Isopropyl-3-phenyl-2-methoxyacetyl-oxazolidin-2-one

Ee > 98%; De > 98%

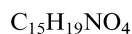
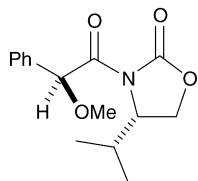
$[\alpha]_D^{20} = -10.8$ (c 2.71, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*S*,2*R*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(4*S*,2*S*)-Isopropyl-3-phenyl-2-methoxyacetyl-oxazolidin-2-one

Ee > 98%; De > 98%

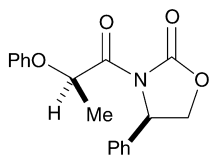
$[\alpha]_D^{20} = +138.0$ (c 0.28, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



$C_{18}H_{17}NO_4$

(4*R*,2*R*)-Phenyl-3-phenoxypropionyl-oxazolidin-2-one

Ee >98%; De >98%

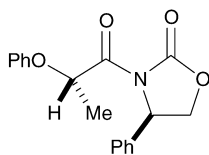
$[\alpha]_D^{20} = +24.2$ (c 0.54, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,2*R*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



$C_{18}H_{17}NO_4$

(4*R*,2*S*)-Phenyl-3-phenoxypropionyl-oxazolidin-2-one

Ee >98%; De >98%

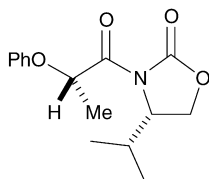
$[\alpha]_D^{20} = -171.1$ (c 0.54, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*R*,2*S*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



$C_{15}H_{19}NO_4$

(4*S*,2*S*)-Isopropyl-3-phenoxypropionyl-oxazolidin-2-one

Ee >98%; De >98%

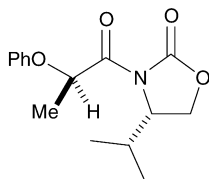
$[\alpha]_D^{20} = +13.4$ (c 2.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



$C_{15}H_{19}NO_4$

(4*S*,2*R*)-Isopropyl-3-phenoxypropionyl-oxazolidin-2-one

Ee >98%; De >98%

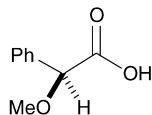
$[\alpha]_D^{20} = +79.5$ (c 2.3, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (4*S*,2*R*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(*S*)-2-Methoxy-2-phenylacetic acid

Ee > 98%

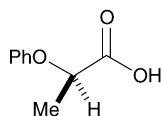
$[\alpha]_{\text{D}}^{20} = +141.0$ (*c* 4.7, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Ewan Boyd, Sameer Chavda, Jason Eames* and Yonas Yohannes

Tetrahedron: Asymmetry 18 (2007) 476



(*R*)-Phenoxypropionic acid

Ee > 98%

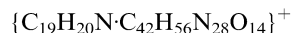
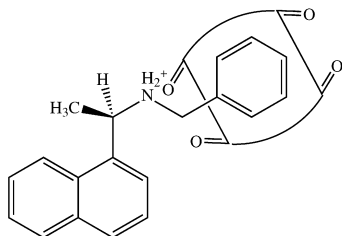
$[\alpha]_{\text{D}}^{20} = +23.6$ (*c* 3.6, CHCl_3)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Lina Yuan, Ruibing Wang and Donal H. Macartney*

Tetrahedron: Asymmetry 18 (2007) 483

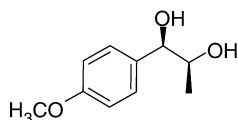


(*R*)-*N*-Benzyl-1-(1-naphthyl)ethylammonium/cucurbit[7]uril {(*R*)-BNEAH·CB[7]}⁺

$[\text{M}] = -940 \text{ deg cm}^2 \text{ dmol}^{-1}$

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(1*R*,2*S*)-1-(4-Methoxyphenyl)propane-1,2-diol

Ee > 99%

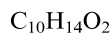
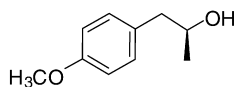
$[\alpha]_{\text{D}}^{24} = -26.7$ (*c* 1.0, CHCl_3)

Source of chirality: baker's yeast-mediated reaction

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

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(S)-1-(4-Methoxyphenyl)propan-2-ol

Ee >99%

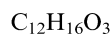
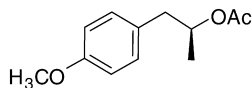
$[\alpha]_D^{24} = +32.6$ (c 1.0, $CHCl_3$)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (S)

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(S)-1-(4-Methoxyphenyl)propan-2-yl acetate

Ee >99%

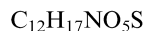
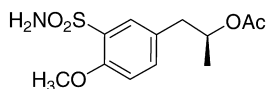
$[\alpha]_D^{24} = +7.5$ (c 1.1, $CHCl_3$)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (S)

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(S)-1-(4-Methoxy-3-sulfamoylphenyl)propan-2-yl acetate

Ee >99%

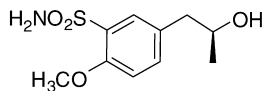
$[\alpha]_D^{24} = +7.6$ (c 0.99, $CHCl_3$)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (S)

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(S)-5-(2-Hydroxypropyl)-2-methoxybenzenesulfonamide

Ee >99%

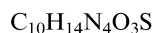
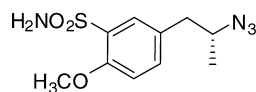
$[\alpha]_D^{24} = +24.1$ (c 0.95, MeOH)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (S)

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(*R*)-5-(2-Azidopropyl)-2-methoxybenzenesulfonamide

Ee >99%

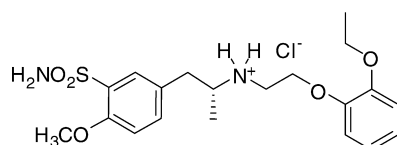
$[\alpha]_{\text{D}}^{24} = -26.4$ (*c* 0.95, CHCl_3)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (*R*)

Daniela Acetti, Elisabetta Brenna* and Claudio Fuganti

Tetrahedron: Asymmetry 18 (2007) 488



(*R*)-5-(2-(2-(2-Ethoxyphenoxy)ethylamino)propyl)-2-methoxybenzenesulfonamide hydrochloride

Ee >99%

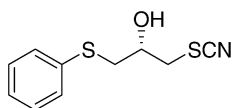
$[\alpha]_{\text{D}}^{24} = -4.1$ (*c* 0.45, MeOH)

Source of chirality: baker's yeast-mediated reaction

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(*S*)-(+)-1-Phenylsufanyl-3-thiocyanatopropan-2-ol

Ee = 96%

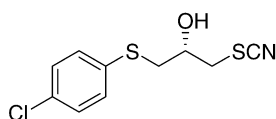
$[\alpha]_{\text{D}}^{25} = +7.2$ (*c* 9.76, CHCl_3)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(*S*)-(+)-1-(4-Chlorophenylsufanyl)-3-thiocyanatopropan-2-ol

Ee = 98%

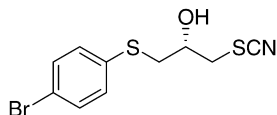
$[\alpha]_{\text{D}}^{23} = +9.4$ (*c* 4.67, CHCl_3)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (*S*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(S)-(+)-1-(4-Bromophenylsulfanyl)-3-thiocyanatopropan-2-ol

Ee = 85%

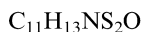
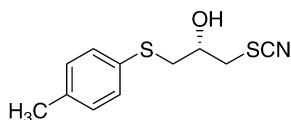
$[\alpha]_D^{23.5} = +6.4$ (c 1.71, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (S)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(S)-(+)-1-Thiocyanato-3-(p-tolylsulfanyl)propan-2-ol

Ee = 80%

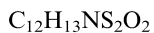
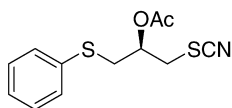
$[\alpha]_D^{27} = +5.7$ (c 0.87, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (S)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(R)-(-)-1-Phenylsulfanyl-3-thiocyanatopropan-2-yl acetate

Ee = 90%

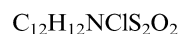
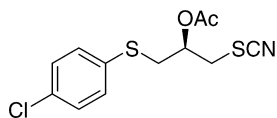
$[\alpha]_D^{28} = -8.4$ (c 5, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (R)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(R)-(-)-1-(4-Chlorophenylsulfanyl)-3-thiocyanatopropan-2-yl acetate

Ee = 58%

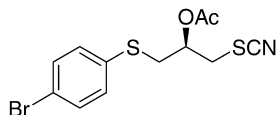
$[\alpha]_D^{23} = -0.65$ (c 9.21, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (R)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 493



(R)-(-)-1-(4-Bromophenylsulfanyl)-3-thiocyanatopropan-2-yl acetate

Ee = 61%

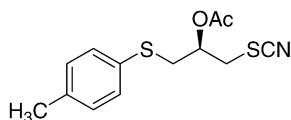
$[\alpha]_D^{23.5} = 0$ (c 4.3, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (R)

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Tetrahedron: Asymmetry 18 (2007) 493



(R)-(-)-3-Thiocyanato-1-(p-tolylsulfanyl)propan-2-yl acetate

Ee = ND

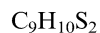
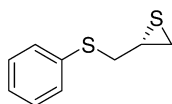
$[\alpha]_D^{23} = -1.9$ (c 5.14, $CHCl_3$)

Source of chirality: enzymatic kinetic resolution

Absolute configuration: (R)

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Tetrahedron: Asymmetry 18 (2007) 493



(S)-(+)-2-(Phenylsulfanylmethyl)thiirane

Ee = 86%

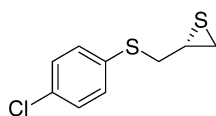
$[\alpha]_D^{24} = +71.4$ (c 6.78, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



(S)-(+)-2-(4-Chlorophenylsulfanylmethyl)thiirane

Ee = 53%

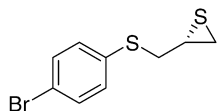
$[\alpha]_D^{24} = +35.2$ (c 5.47, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



$C_9H_9S_2Br$

(S)-(+)-2-(4-Bromophenylsulfanylmethyl)thiirane

Ee = 59%

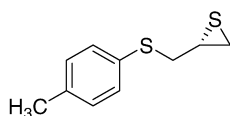
$[\alpha]_D^{24} = +33.0$ (c 4.36, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



$C_{10}H_{12}S_2$

(S)-(+)-2-(p-Tolylsulfanylmethyl)thiirane

Ee = 32%

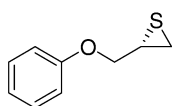
$[\alpha]_D^{24} = +24.2$ (c 4.54, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



$C_9H_{10}SO$

(S)-(-)-2-(Phenoxymethyl)thiirane

Ee = 97%

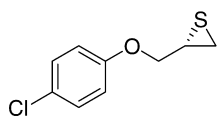
$[\alpha]_D^{25} = -13.6$ (c 2.8, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



C_9H_9ClSO

(S)-(-)-2-(4-Chlorophenoxymethyl)thiirane

Ee = 90%

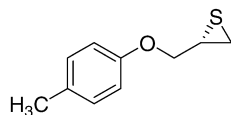
$[\alpha]_D^{25} = -12.5$ (c 4.64, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 493



(S)-(-)-2-(p-Tolyloxymethyl)thiirane

Ee = 86%

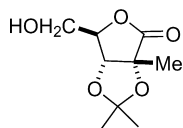
$[\alpha]_D^{25} = -10.7$ (c 4.48, $CHCl_3$)

Source of chirality: chemo-enzymatic synthesis

Absolute configuration: (S)

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Tetrahedron: Asymmetry 18 (2007) 500



2,3-O-Isopropylidene-2-C-methyl-D-ribo-1,4-lactone

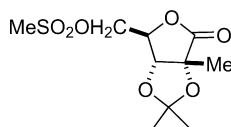
Ee = 100%

$[\alpha]_D^{19} = -35.6$ (c 1.4, acetone)

Source of chirality: 2-C-methyl-D-ribo-1,4-lactone
as starting material

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Timothy D. W. Claridge and George W. J. Fleet*

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2,3-O-Isopropylidene-5-O-methanesulfonyl-2-C-methyl-D-ribo-1,4-lactone

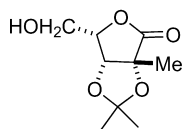
Ee = 100%

$[\alpha]_D^{24} = -24.7$ (c 1.0, $CHCl_3$)

Source of chirality: 2-C-methyl-D-ribo-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

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2,3-O-Isopropylidene-2-C-methyl-L-lyxono-1,4-lactone

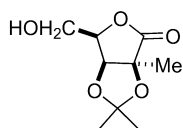
Ee = 100%

$[\alpha]_D^{22} = -74.1$ (c 0.6, acetone)

Source of chirality: 2-C-methyl-D-ribo-1,4-lactone
as starting material

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2,3-*O*-Isopropylidene-2-*C*-methyl-*D*-lyxono-1,4-lactone

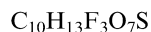
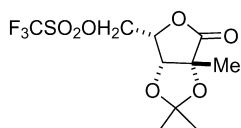
Ee = 100%

$[\alpha]_D^{23} = +77.2$ (*c* 1.8, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

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Timothy D. W. Claridge and George W. J. Fleet*

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2,3-*O*-Isopropylidene-2-*C*-methyl-5-*O*-trifluoromethanesulfonyl-*L*-lyxono-1,4-lactone

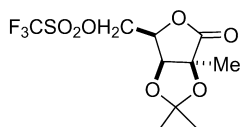
Ee = 100%

$[\alpha]_D^{21} = -55.9$ (*c* 2.0, acetone)

Source of chirality: 2-*C*-methyl-*D*-ribo-1,4-lactone
as starting material

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2,3-*O*-Isopropylidene-2-*C*-methyl-5-*O*-trifluoromethanesulfonyl-*D*-lyxono-1,4-lactone

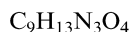
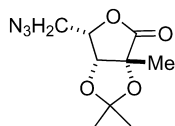
Ee = 100%

$[\alpha]_D^{21} = +60.9$ (*c* 0.6, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

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5-Azido-5-deoxy-2,3-*O*-isopropylidene-2-*C*-methyl-*L*-lyxono-1,4-lactone

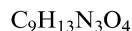
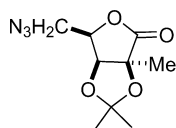
Ee = 100%

$[\alpha]_D^{21} = -72.0$ (*c* 0.4, acetone)

Source of chirality: 2-*C*-methyl-*D*-ribo-1,4-lactone
as starting material

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5-Azido-5-deoxy-2,3-*O*-isopropylidene-2-*C*-methyl-*D*-lyxono-1,4-lactone

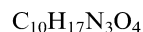
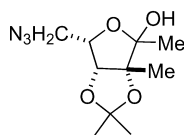
Ee = 100%

$[\alpha]_D^{20} = +73.9$ (*c* 0.9, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

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6-Azido-1,6-dideoxy-3,4-*O*-isopropylidene-3-*C*-methyl-*L*-tagatofuranose

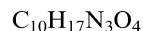
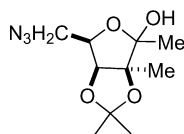
Ee = 100%

$[\alpha]_D^{24} = -5.1$ (*c* 0.5, acetone)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone
as starting material

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Timothy D. W. Claridge and George W. J. Fleet*

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6-Azido-1,6-dideoxy-3,4-*O*-isopropylidene-3-*C*-methyl-*D*-tagatofuranose

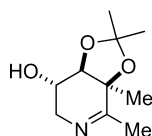
Ee = 100%

$[\alpha]_D^{24} = +7.1$ (*c* 0.5, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

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2,6-Imino-3,4-*O*-isopropylidene-3-*C*-methyl-1,2,6-trideoxy-*L*-tagatopyranose [(3*S*,4*R*,5*S*)-5,6-dimethyl-4,5-*O*-isopropylidene-2,3,4,5-tetrahydropyridine-3,4,5-triol]

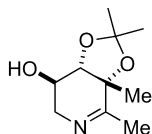
Ee = 100%

$[\alpha]_D^{21} = -46.0$ (*c* 1.5, MeOH)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{10}H_{17}NO_3$

2,6-Imino-3,4-*O*-isopropylidene-3-*C*-methyl-1,2,6-trideoxy-*D*-tagatopyranose [(3*R*,4*S*,5*R*)-5,6-dimethyl-4,5-*O*-isopropylidene-2,3,4,5-tetrahydropyridine-3,4,5-triol]

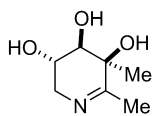
Ee = 100%

$[\alpha]_D^{20} = +49.0$ (*c* 1.6, MeOH)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_7H_{13}NO_3$

2,6-Imino-3-*C*-methyl-1,2,6-trideoxy-*L*-tagatopyranose [(3*S*,4*R*,5*S*)-5,6-dimethyl-2,3,4,5-tetrahydropyridine-3,4,5-triol]

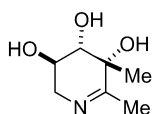
Ee = 100%

$[\alpha]_D^{21} = +30.6$ (*c* 1.4, MeOH)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

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$C_7H_{13}NO_3$

2,6-Imino-3-*C*-methyl-1,2,6-trideoxy-*D*-tagatopyranose [(3*R*,4*S*,5*R*)-5,6-dimethyl-2,3,4,5-tetrahydropyridine-3,4,5-triol]

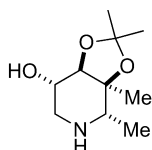
Ee = 100%

$[\alpha]_D^{21} = -34.7$ (*c* 0.3, MeOH)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{10}H_{19}NO_3$

1,5-Imino-3,4-*O*-isopropylidene-4-*C*-methyl-1,5,6-trideoxy-*L*-altritol

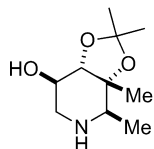
Ee = 100%

$[\alpha]_D^{21} = -23.1$ (*c* 1.6, acetone)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone as starting material

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Timothy D. W. Claridge and George W. J. Fleet*

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$C_{10}H_{19}NO_3$

1,5-Imino-3,4-*O*-isopropylidene-4-*C*-methyl-1,5,6-trideoxy-*D*-altritol

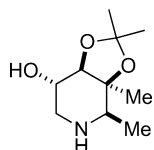
Ee = 100%

$[\alpha]_D^{22} = +17.5$ (*c* 1.2, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{10}H_{19}NO_3$

1,5-Dideoxy-1,5-imino-3,4-*O*-isopropylidene-4-*C*-methyl-*D*-fucitol

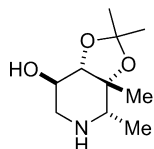
Ee = 100%

$[\alpha]_D^{21} = -13.0$ (*c* 0.2, acetone)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone
as starting material

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Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{10}H_{19}NO_3$

1,5-Dideoxy-1,5-imino-3,4-*O*-isopropylidene-4-*C*-methyl-*L*-fucitol

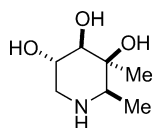
Ee = 100%

$[\alpha]_D^{22} = +8.2$ (*c* 2.2, acetone)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_7H_{15}NO_3$

1,5-Dideoxy-1,5-imino-4-*C*-methyl-*D*-fucitol

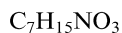
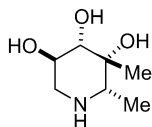
Ee = 100%

$[\alpha]_D^{21} = +33.7$ (*c* 0.4, MeOH)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



4-C-Methyl DFJ [1,5-dideoxy-1,5-imino-4-C-methyl-L-fucitol]

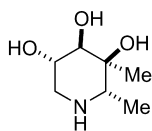
Ee = 100%

$[\alpha]_D^{21} = -25.1$ (c 0.7, MeOH)

Source of chirality: 2-C-methyl-D-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



1,5-Imino-4-C-methyl-1,5,6-trideoxy-L-altritol

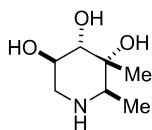
Ee = 100%

$[\alpha]_D^{21} = +5.1$ (c 0.4, MeOH)

Source of chirality: 2-C-methyl-D-ribo-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



1,5-Imino-4-C-methyl-1,5,6-trideoxy-D-altritol

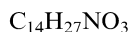
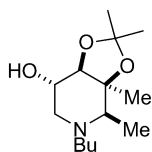
Ee = 100%

$[\alpha]_D^{21} = -3.9$ (c 0.5, MeOH)

Source of chirality: 2-C-methyl-D-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



N-Butyl-1,5-dideoxy-1,5-imino-3,4-O-isopropylidene-4-C-methyl-D-fucitol

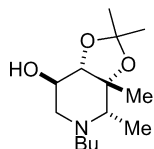
Ee = 100%

$[\alpha]_D^{22} = +8.1$ (c 0.4, MeOH)

Source of chirality: 2-C-methyl-D-ribo-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{14}H_{27}NO_3$

N-Butyl-1,5-dideoxy-1,5-imino-3,4-*O*-isopropylidene-4-*C*-methyl-L-fucitol

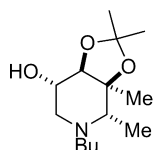
Ee = 100%

$[\alpha]_D^{23} = -2.4$ (*c* 1.4, MeOH)

Source of chirality: 2-*C*-methyl-D-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{14}H_{27}NO_3$

N-Butyl-1,5-imino-3,4-*O*-isopropylidene-4-*C*-methyl-1,5,6-trideoxy-L-altritol

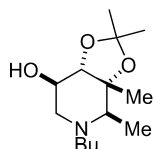
Ee = 100%

$[\alpha]_D^{22} = +13.0$ (*c* 0.3, MeOH)

Source of chirality: 2-*C*-methyl-D-ribono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{14}H_{27}NO_3$

N-Butyl-1,5-imino-3,4-*O*-isopropylidene-4-*C*-methyl-1,5,6-trideoxy-D-altritol

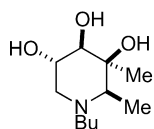
Ee = 100%

$[\alpha]_D^{22} = -9.9$ (*c* 0.8, MeOH)

Source of chirality: 2-*C*-methyl-D-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



$C_{11}H_{23}NO_3$

N-Butyl-1,5-dideoxy-1,5-imino-4-*C*-methyl-D-fucitol

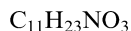
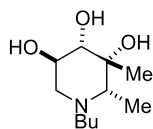
Ee = 100%

$[\alpha]_D^{21} = +1.0$ (*c* 0.7, MeOH)

Source of chirality: 2-*C*-methyl-D-ribono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



N-Butyl-1,5-dideoxy-1,5-imino-4-*C*-methyl-*L*-fucitol

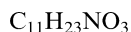
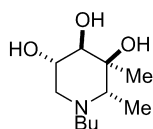
Ee = 100%

$[\alpha]_D^{22} = -4.2$ (*c* 0.2, MeOH)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



N-Butyl-1,5-imino-4-*C*-methyl-1,5,6-trideoxy-*L*-altritol

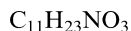
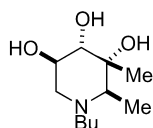
Ee = 100%

$[\alpha]_D^{21} = +22.1$ (*c* 0.8, MeOH)

Source of chirality: 2-*C*-methyl-*D*-ribono-1,4-lactone
as starting material

David J. Hotchkiss, Atsushi Kato, Barbara Odell,
Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 18 (2007) 500



N-Butyl-1,5-imino-4-*C*-methyl-1,5,6-trideoxy-*D*-altritol

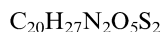
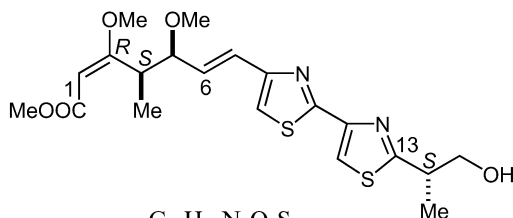
Ee = 100%

$[\alpha]_D^{21} = -13.4$ (*c* 0.7, MeOH)

Source of chirality: 2-*C*-methyl-*D*-lyxono-1,4-lactone
as starting material

Hiroyuki Akita,* Yuki Iwaki, Keisuke Kato, Jianhua Qi and
Makoto Ojika

Tetrahedron: Asymmetry 18 (2007) 513



(4*R*,5*S*,6*E*,14*S*)-Cystothiazole F

$[\alpha]_D^{26} = +86.2$ (*c* 1.05, CHCl₃)

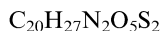
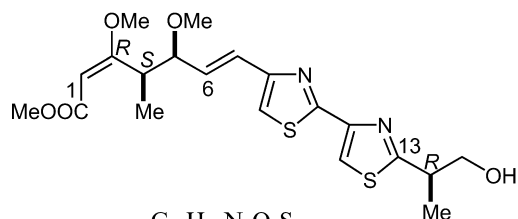
Ee = 99%

Source of chirality: lipase

Absolute configuration: (4*R*,5*S*,6*E*,14*S*)

Hiroyuki Akita,* Yuki Iwaki, Keisuke Kato, Jianhua Qi and Makoto Ojika

Tetrahedron: Asymmetry 18 (2007) 513



(4*R*,5*S*,6*E*,14*R*)-Cystothiazole F

$$[\alpha]_{\text{D}}^{26} = +94.6 \text{ (} c \text{ 0.78, CHCl}_3 \text{)}$$

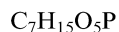
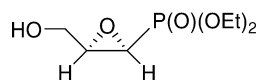
$$\text{Ee} = 99\%$$

Source of chirality: lipase

Absolute configuration: (4*R*,5*S*,6*E*,14*R*)

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*S*,2*R*)-1,2-epoxy-3-hydroxypropylphosphonate

$$\text{Ee} = 100\%$$

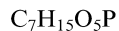
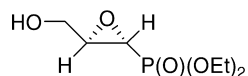
$$[\alpha]_{\text{D}}^{20} = -10.2 \text{ (} c \text{ 1.0, CHCl}_3 \text{)}$$

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*R*,2*R*)-1,2-epoxy-3-hydroxypropylphosphonate

$$\text{Ee} = 100\%$$

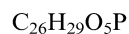
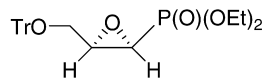
$$[\alpha]_{\text{D}}^{20} = +24.8 \text{ (} c \text{ 1.5, CHCl}_3 \text{)}$$

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*S*,2*R*)-1,2-epoxy-3-trityloxypropylphosphonate

$$\text{Ee} = 100\%$$

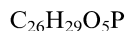
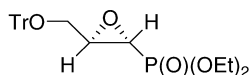
$$[\alpha]_{\text{D}}^{20} = -10.0 \text{ (} c \text{ 1.15, CHCl}_3 \text{)}$$

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*R*,2*R*)-1,2-epoxy-3-trityloxypropylphosphonate

Ee = 100%

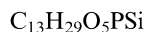
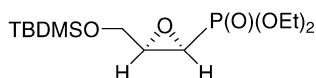
$[\alpha]_{\text{D}}^{20} = +17.8$ (*c* 1.14, CHCl_3)

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*S*,2*R*)-3-(*tert*-butyltrimethylsilyloxy)-1,2-epoxypropylphosphonate

Ee = 100%

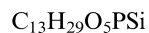
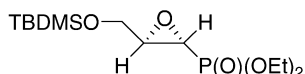
$[\alpha]_{\text{D}}^{20} = +2.6$ (*c* 1.3, CHCl_3)

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*R*,2*R*)-3-(*tert*-butyltrimethylsilyloxy)-1,2-epoxypropylphosphonate

Ee = 100%

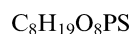
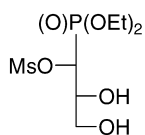
$[\alpha]_{\text{D}}^{20} = +16.0$ (*c* 1.5, CHCl_3)

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*R*,2*R*)-2,3-dihydroxy-1-mesyloxypropylphosphonate

Ee = 100%

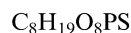
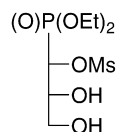
$[\alpha]_{\text{D}}^{20} = -15.5$ (*c* 1.25, CHCl_3)

Source of chirality: D-mannitol

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

Andrzej E. Wróblewski* and Irena I. Bąk-Sypień

Tetrahedron: Asymmetry 18 (2007) 520



Diethyl (1*S*,2*R*)-2,3-dihydroxy-1-mesyloxypropylphosphonate

Ee = 100%

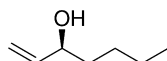
$[\alpha]_D^{20} = +20.15$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-mannitol

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

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(3*S*)-1-Hepten-3-ol

Ee = 95%

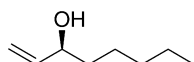
$[\alpha]_D^{25} = +10.3$ (*c* 1.45, pentane)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(3*S*)-1-Octen-3-ol

Ee = 95%

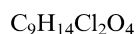
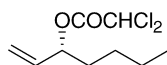
$[\alpha]_D^{25} = +7.0$ (*c* 1.0, pentane)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(1*R*)-1-Butyl-2-propenyl dichloroacetate

Ee = >99.9%

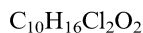
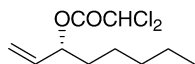
$[\alpha]_D^{25} = +9.5$ (*c* 1.35, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1*R*)

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(1*R*)-1-Pentyl-2-propenyl dichloroacetate

Ee = >99.9%

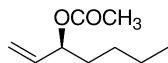
$[\alpha]_D^{25} = +7.2$ (c 1.2, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1*R*)

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(1*S*)-1-Butyl-2-propenyl acetate

Ee = >99.9%

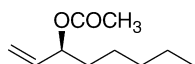
$[\alpha]_D^{25} = -15$ (c 3.1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1*S*)

Fulvia Felluga,* Cristina Forzato, Franco Ghelfi, Patrizia Nitti, Giuliana Pitacco, Ugo Maria Pagnoni and Fabrizio Roncaglia

Tetrahedron: Asymmetry 18 (2007) 527



(1*S*)-1-Pentyl-2-propenyl acetate

Ee = >99.9%

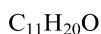
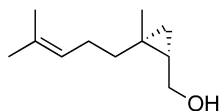
$[\alpha]_D^{25} = -11.5$ (c 2.8, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1*S*)

Hiroki Asao, Hiroyuki Sakauchi, Shigefumi Kuwahara and Hiromasa Kiyota*

Tetrahedron: Asymmetry 18 (2007) 537



(-)-(2*S*,3*R*)-2,3-Methano-3,7-dimethyl-6-octen-1-ol

Ee = >95%

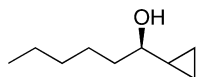
$[\alpha]_D^{25} = -8.3$ (c 1.0, Et_2O)

Source of chirality: enantioselective cyclopropanation

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

Hiroki Asao, Hiroyuki Sakauchi, Shigefumi Kuwahara and Hiromasa Kiyota*

Tetrahedron: Asymmetry 18 (2007) 537



$C_9H_{18}O$

(-)-(R)-1,2-Methano-3-octanol

Ee = 99.2%

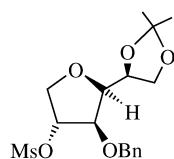
$[\alpha]_D^{25} = -0.3$ (c 0.65, Et₂O)

Source of chirality: (R)-1-octen-3-ol

Absolute configuration: (R)

L. Vijaya Raghava Reddy, P. Venkat Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 18 (2007) 542



$C_{17}H_{24}O_7S$

(2S,3S,4S,5R)-1,2-O-Isopropylidene-3,6-anhydro-4-O-benzyl-5-O-methane-sulfonyl-D-galactitol

De >99%

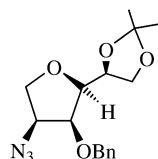
$[\alpha]_D = +12.0$ (c 0.050, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S,4S,5R)

L. Vijaya Raghava Reddy, P. Venkat Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 18 (2007) 542



$C_{14}H_{21}O_4N_3$

(2S,3S,4S,5S)-1,2-O-Isopropylidene-3,6-anhydro-4-O-benzyl-5-azido-D-galactitol

De >99%

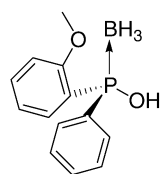
$[\alpha]_D = +47.8$ (c 0.138, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S,4S,5S)

Marek Stankevič and K. Michał Pietrusiewicz*

Tetrahedron: Asymmetry 18 (2007) 552



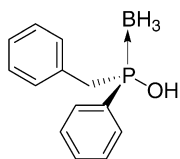
$C_{13}H_{16}BO_2P$

(R)-(-)-o-Anisylphenylphosphinous acid-borane

$[\alpha]_D = -19.2$ (c 1.04, CHCl₃) (96% ee)

Source of chirality: resolution of racemic acid

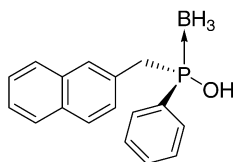
Absolute configuration: (R)

 $C_{13}H_{16}BOP$

(+)-Benzylphenylphosphinous acid-borane

 $[\alpha]_D = +57.9$ (c 1.06, $CHCl_3$) (100% ee)

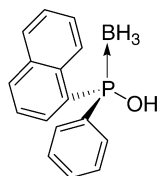
Source of chirality: resolution of racemic acid

 $C_{17}H_{18}BOP$

(+)-(2-Naphthylmethyl)phenylphosphinous acid-borane

 $[\alpha]_D = +57.8$ (c 1.04, $CHCl_3$) (100% ee)

Source of chirality: resolution of racemic acid

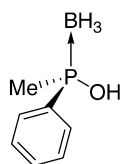
 $C_{16}H_{16}BOP$

(R)-(-)-(1-Naphthyl)phenylphosphinous acid-borane

 $[\alpha]_D = -40.8$ (c 1.04, $CHCl_3$) (100% ee)

Source of chirality: resolution of racemic acid

Absolute configuration: (R)

 $C_7H_{12}BOP$

(S)-(-)-Methylphenylphosphinous acid-borane

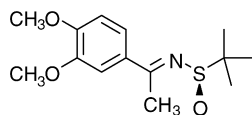
 $[\alpha]_D = -21.7$ (c 1.06, $CHCl_3$) (100% ee)

Source of chirality: resolution of racemic acid

Absolute configuration: (S)

Agnieszka Grajewska and Maria D. Rozwadowska*

Tetrahedron: Asymmetry 18 (2007) 557



$C_{14}H_{21}NO_3S$

(*R*)-(+)-*N*-[1-(3,4-Dimethoxyphenylethylidene)]-2-methylpropanesulfinamide

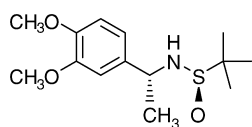
$[\alpha]_D = +22.2$ (*c* 1.12, $CHCl_3$)

Source of chirality: *N*-*tert*-butanesulfinamide

Absolute configuration: (*R*)

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Tetrahedron: Asymmetry 18 (2007) 557



$C_{14}H_{23}NO_3S$

(*R,R*)-(-)-*N*-[1-(3,4-Dimethoxyphenylethyl)]-2-methylpropanesulfinamide

De 96% [by chiral HPLC]

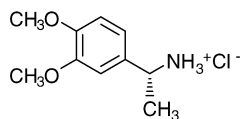
$[\alpha]_D = -36.3$ (*c* 0.32, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,R*)

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Tetrahedron: Asymmetry 18 (2007) 557



$C_{10}H_{15}NO_2 \cdot HCl$

(*R*)-(+)-1-(3,4-Dimethoxyphenyl)ethanamine hydrochloride

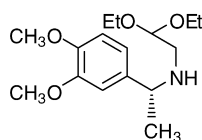
$[\alpha]_D = +5.8$ (*c* 0.86, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

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Tetrahedron: Asymmetry 18 (2007) 557



$C_{16}H_{27}NO_4$

(*R*)-(+)-*N*-(2,2-Diethoxyethyl)-1-(3,4-dimethoxyphenyl)ethanamine

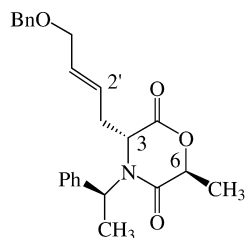
$[\alpha]_D = +28.0$ (*c* 0.66, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Antonio Arcelli,* Daniele Balducci, Sonia de Fatima Estevao Neto,
Gianni Porzi* and Monica Sandri

Tetrahedron: Asymmetry 18 (2007) 562



$C_{24}H_{27}NO_4$

(3*R*,6*S*)-3-(4'-Benzyloxy-(2'*E*)-butenyl)-6-methyl-4-[(*S*)-phenethyl]-morpholine-2,5-dione

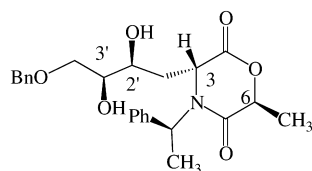
$[\alpha]_D = -207$ (*c* 0.4, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: (3*R*,6*S*)

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Gianni Porzi* and Monica Sandri

Tetrahedron: Asymmetry 18 (2007) 562



$C_{24}H_{29}NO_6$

(3*R*,6*S*,2'*S*,3'*S*)-3-(4'-Benzyloxy-2',3'-dihydroxybutyl)-6-methyl-4-[(*S*)-phenethyl]-morpholine-2,5-dione

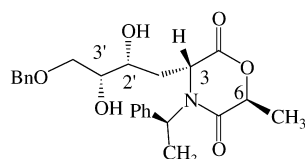
$[\alpha]_D = +13.5$ (*c* 2, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

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Tetrahedron: Asymmetry 18 (2007) 562



$C_{24}H_{29}NO_6$

(3*R*,6*S*,2'*R*,3'*R*)-3-(4'-Benzyloxy-2',3'-dihydroxybutyl)-6-methyl-4-[(*S*)-phenethyl]-morpholine-2,5-dione

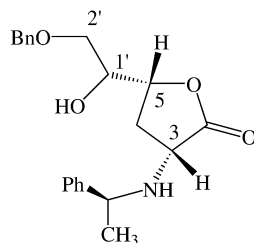
$[\alpha]_D = -10.6$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

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

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Gianni Porzi* and Monica Sandri

Tetrahedron: Asymmetry 18 (2007) 562



$C_{21}H_{25}NO_4$

(3*R*,5*R*,1'*R*)-5-(2'-Benzyloxy-1'-hydroxyethyl)-3-[(*S*)-phenylethylamino]-dihydro-furan-2-one

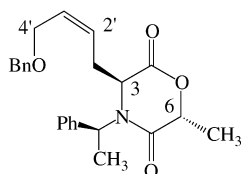
$[\alpha]_D = -65.6$ (*c* 0.7, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: (3*R*,5*R*,1'*R*)

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Tetrahedron: Asymmetry 18 (2007) 562



$[\alpha]_D = +84.8$ (*c* 0.9, CHCl₃)

Source of chirality: (*S*)-phenylethylamine

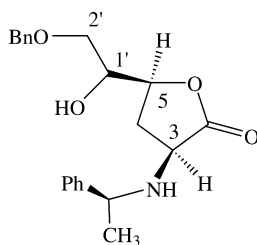
Absolute configuration: (3*S*,6*R*)

C₂₄H₂₇NO₄

(3*S*,6*R*)-3-(4'-Benzyloxy-(2'Z)-butenyl)-6-methyl-4-[(*S*)-phenethyl]-morpholine-2,5-dione

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Tetrahedron: Asymmetry 18 (2007) 562



$[\alpha]_D = -18.7$ (*c* 0.6, CHCl₃)

Source of chirality: (*S*)-phenylethylamine

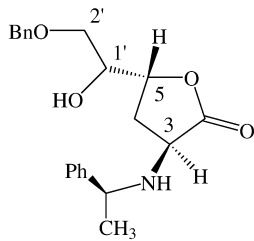
Absolute configuration: (3*S*,5*S*,1'*S*)

C₂₁H₂₅NO₄

(3*S*,5*S*,1'*S*)-5-(2'-Benzyloxy-1'-hydroxyethyl)-3-[(*S*)-phenylethylamino]-dihydro-furan-2-one

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Tetrahedron: Asymmetry 18 (2007) 562



$[\alpha]_D = -94.6$ (*c* 0.5, CHCl₃)

Source of chirality: (*S*)-phenylethylamine

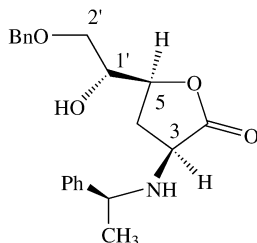
Absolute configuration: (3*S*,5*R*,1'*R*)

C₂₁H₂₅NO₄

(3*S*,5*R*,1'*R*)-5-(2'-Benzyloxy-1'-hydroxyethyl)-3-[(*S*)-phenylethylamino]-dihydro-furan-2-one

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Tetrahedron: Asymmetry 18 (2007) 562



$[\alpha]_D = -63.7$ (*c* 0.4, CHCl₃)

Source of chirality: (*S*)-phenylethylamine

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

C₂₁H₂₅NO₄

(3*S*,5*S*,1'*R*)-5-(2'-Benzyloxy-1'-hydroxyethyl)-3-[(*S*)-phenylethylamino]-dihydro-furan-2-one