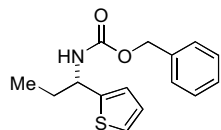


Stereochemistry abstracts

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



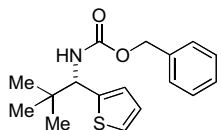
$C_{15}H_{17}NO_2S$

(*S*)-[1-(1-Thiophen-2-yl-propyl)-carbamic acid benzyl ester

Ee = 99% (Chiral HPLC)
 $[\alpha]_D^{25} = -57.8$ (*c* 1.4, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



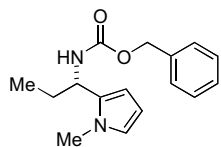
$C_{17}H_{21}NO_2S$

(*S*)-[2,2-Dimethyl-1-thiophen-3-yl-propyl]-carbamic acid benzyl ester

Ee = 93% (Chiral HPLC)
 $[\alpha]_D^{25} = -8.1$ (*c* 1.5, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



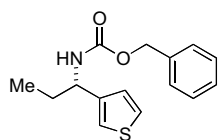
$C_{16}H_{20}N_2O_2$

(*S*)-[1-(1-Methyl-1*H*-pyrrol-2-yl)-propyl]-carbamic acid benzyl ester

Ee = 88% (Chiral HPLC)
 $[\alpha]_D^{25} = -62.4$ (*c* 1.8, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



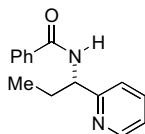
$C_{15}H_{17}NO_2S$

(*S*)-[1-(1-Thiophen-3-yl-propyl)-carbamic acid benzyl ester

Ee = 94% (Chiral HPLC)
 $[\alpha]_D^{25} = -47.4$ (*c* 1.1, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747

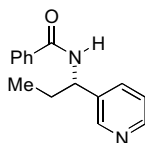


$C_{15}H_{16}N_2O$
(1*S*)-*N*-(1-Pyridin-2-yl-propyl)-benzamide

Ee = 96% (Chiral HPLC)
 $[\alpha]_D^{25} = -16.0$ (c 1.0, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747

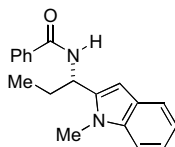


$C_{15}H_{16}N_2O$
(1*S*)-*N*-(1-Pyridin-3-yl-propyl)-benzamide

Ee = 96% (Chiral HPLC)
 $[\alpha]_D^{25} = +11.7$ (c 1.4, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747

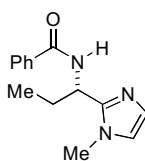


$C_{19}H_{20}N_2O$
(1*S*)-*N*-[1-(1-Methyl-1*H*-indol-2-yl)-propyl]-benzamide

Ee = 94% (Chiral HPLC)
 $[\alpha]_D^{25} = -120.2$ (c 1.6, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747

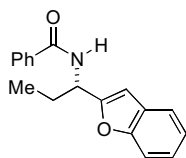


$C_{14}H_{17}N_3O$
(1*S*)-*N*-[1-(1-Methyl-1*H*-imidazol-2-yl)-propyl]-benzamide

Ee = 99% (Chiral HPLC)
 $[\alpha]_D^{25} = -25.0$ (c 1.2, $CHCl_3$)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



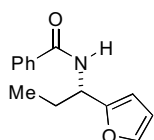
C₁₈H₁₇NO₂

(1*S*)-*N*-(1-Benzofuran-2-yl-propyl)-benzamide

Ee = 97% (Chiral HPLC)
[α]_D²⁵ = -85.4 (c 0.9, CHCl₃)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



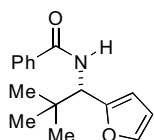
C₁₄H₁₅NO₂

(1*S*)-*N*-(1-Furan-2-yl-propyl)-benzamide

Ee = 99% (Chiral HPLC)
[α]_D²⁵ = -62.4 (c 1.1, CHCl₃)

Dieter Enders* and Giuseppe Del Signore

Tetrahedron: Asymmetry 15 (2004) 747



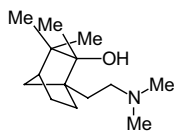
C₁₆H₁₉NO₂

(1*S*)-*N*-(1-Furan-2-yl-2,2-dimethylpropyl)-benzamide

Ee = 98% (Chiral HPLC)
[α]_D²⁵ = -43.0 (c 1.3, CHCl₃)

Antonio García Martínez,* Enrique Teso Vilar, Amelia García Fraile,
Santiago de la Moya Cerero* and Beatriz Lora Maroto

Tetrahedron: Asymmetry 15 (2004) 753



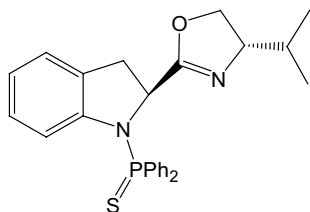
C₁₄H₂₇NO

1-[2-(Dimethylamino)ethyl]-2,3,3-trimethylnorbornan-2-ol

[α]_D²⁰ = +15.4 (c 2.20, CHCl₃)
Source of chirality: natural (-)-(1*R*)-fenchone
Absolute configuration: (1*R*,2*R*)

Catherine Blanc and Francine Agbossou-Niedercorn*

Tetrahedron: Asymmetry 15 (2004) 757



$C_{26}H_{29}N_2OPS$

1-(Diphenyl-phosphinothioyl)-2-(3'-isopropyl-4',5'-dihydro-oxazo-2'-yl)-2,3-dihydro-1H-indole

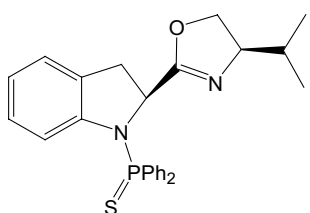
$[\alpha]_D = -57.4$ (*c* 0.012, $CHCl_3$)

Source of chirality: L-indoline carboxylic acid,
L-valinol

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

Catherine Blanc and Francine Agbossou-Niedercorn*

Tetrahedron: Asymmetry 15 (2004) 757



$C_{26}H_{29}N_2OPS$

1-(Diphenyl-phosphinothioyl)-2-(3'-isopropyl-4',5'-dihydro-oxazo-2'-yl)-2,3-dihydro-1H-indole

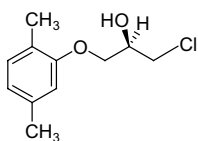
$[\alpha]_D = -10.4$ (*c* 0.012, $CHCl_3$)

Source of chirality: L-indoline carboxylic acid,
D-valinol

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

Fernando Martínez Lagos, Jose D. Carballeira, Jose L. Bermúdez,
Emilio Alvarez and Jose V. Sinisterra*

Tetrahedron: Asymmetry 15 (2004) 763



$C_{11}H_{15}ClO_2$

(2*R*)-(-)-1-chloro-3-(2,5-dimethylphenoxy)propan-2-ol

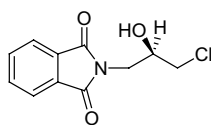
Ee = 99%

$[\alpha]_D^{25} = -7.2$ (*c* 0.46, EtOH)

Source of chirality: enzymatic reduction of ketone
Absolute configuration: 2*R*

Fernando Martínez Lagos, Jose D. Carballeira, Jose L. Bermúdez,
Emilio Alvarez and Jose V. Sinisterra*

Tetrahedron: Asymmetry 15 (2004) 763



(2*R*)-(+)-1-chloro-3-phthalimidylpropan-2-ol

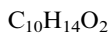
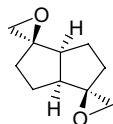
Ee = 93%

$[\alpha]_D^{25} = +16.2$ (*c* 0.48, EtOH)

Source of chirality: enzymatic reduction of ketone
Absolute configuration: 2*R*

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



(1S,2S,5S,6S)-Bicyclo[3.3.0]octan-2,6-dione diepoxide

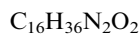
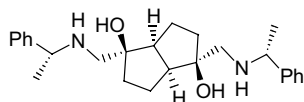
$[\alpha]_D^{20} = +108.8$ (*c* 2.15, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1S,2S,5S,6S)

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



(1S,2S,5S,6S,1'R,1''R)-2,6-Bis(1-phenylethyl-amino-methyl)-bicyclo[3.3.0]octan-2,6-diol

$[\alpha]_D^{20} = +56.5$ (*c* 0.85, $CHCl_3$)

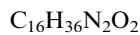
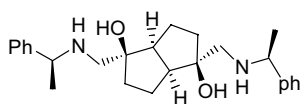
Source of chirality: enzymatic resolution,

(*R*)-1-phenylethylamine

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

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



(1S,2S,5S,6S,1'S,1''S)-2,6-Bis(1-phenylethyl-amino-methyl)-bicyclo[3.3.0]octan-2,6-diol

$[\alpha]_D^{20} = -12.5$ (*c* 3.20, $CHCl_3$)

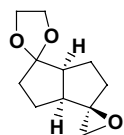
Source of chirality: enzymatic resolution,

(*S*)-1-phenylethylamine

Absolute configuration: (1S,2S,5S,6S,1'S,1''S)

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



(1S,5S,6S)-Bicyclo[3.3.0]octan-2,6-dione 2-epoxide 6-ethylene ketal

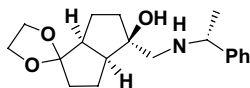
$[\alpha]_D^{20} = +63.6$ (*c* 1.15, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (1S,5S,6S)

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



$C_{18}H_{24}NO_3$

(1*S*,5*S*,6*S*,1'*R*)-6-Hydroxy-6-(1-phenylethyl-amino-methyl)-bicyclo[3.3.0]octan-2-one ethylene ketal

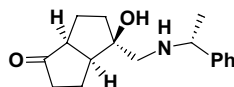
$[\alpha]_D^{20} = +70.7$ (*c* 1.35, $CHCl_3$)

Source of chirality: enzymatic resolution,
(*R*)-1-phenylethylamine

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

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



$C_{17}H_{23}NO_2$

(1*S*,5*S*,6*S*,1'*R*)-6-Hydroxy-6-(1-phenylethyl-amino-methyl)-bicyclo[3.3.0]octan-2-one

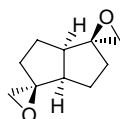
$[\alpha]_D^{20} = +146.5$ (*c* 0.85, $CHCl_3$)

Source of chirality: enzymatic resolution,
(*R*)-1-phenylethylamine

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

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



$C_{10}H_{14}O_2$

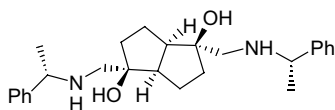
(1*R*,2*R*,5*R*,6*R*)-Bicyclo[3.3.0]octan-2,6-dione diepoxide

$[\alpha]_D^{20} = -111.6$ (*c* 1.20, $CHCl_3$)

Source of chirality: enzymatic resolution
Absolute configuration: (1*R*,2*R*,5*R*,6*R*)

Yu-Wu Zhong, Ping Tian and Guo-Qiang Lin*

Tetrahedron: Asymmetry 15 (2004) 771



$C_{16}H_{36}N_2O_2$

(1*R*,2*R*,5*R*,6*R*,1'*S*,1''*S*)-2,6-Bis(1-phenylethyl-amino-methyl)-bicyclo[3.3.0]octan-2,6-diol

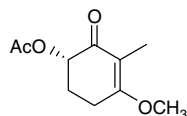
$[\alpha]_D^{20} = -53.0$ (*c* 1.55, $CHCl_3$)

Source of chirality: enzymatic resolution,
(*S*)-1-phenylethylamine

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

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_{10}H_{14}O_4$

(*S*)-4-Methoxy-3-methyl-2-oxocyclohex-3-en-1-yl acetate

Ee >98%

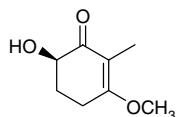
$[\alpha]_D^{20} = -87.94$ (*c* 0.6, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_8H_{12}O_3$

(*R*)-6-Hydroxy-3-methoxy-2-methylcyclohex-2-en-1-one

Ee = 96%

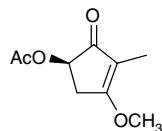
$[\alpha]_D^{20} = +167.3$ (*c* 0.3, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_9H_{12}O_4$

(*R*)-4-Methoxy-3-methyl-2-oxocyclopent-3-en-1-yl acetate

Ee = 98%

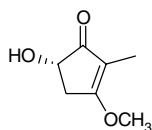
$[\alpha]_D^{20} = +32.1$ (*c* 0.01, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_7H_{10}O_3$

(*S*)-5-Hydroxy-3-methoxy-2-methylcyclopent-2-en-1-one

Ee = 95%

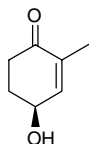
$[\alpha]_D^{20} = +78.8$ (*c* 0.1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_7H_{10}O_2$

(*R*)-4-Hydroxy-2-methylcyclohex-2-en-1-one

Ee = 98%

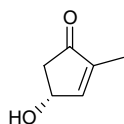
$[\alpha]_D^{20} = +46.7$ (c 0.1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Ayhan S. Demir,* Hamide Fındık and Elif Köse

Tetrahedron: Asymmetry 15 (2004) 777



$C_6H_8O_2$

(*S*)-4-Hydroxy-2-methylcyclopent-2-en-1-one

Ee = 95%

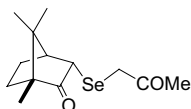
$[\alpha]_D^{20} = -33.5$ (c 1.1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{13}H_{20}O_2Se$

(*R*)-Camphorselenoacetone

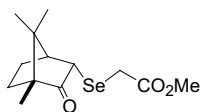
$[\alpha]_D^{20} = +18.3$ (c 1.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{13}H_{20}O_3Se$

Methyl (*R*)-camphorselenoacetate

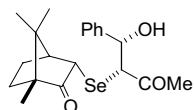
$[\alpha]_D^{25} = -23.9$ (c 3.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{20}H_{26}O_3Se$

(3*R*,4*S*)-3-(Camphorseleno)-4-hydroxy-4-phenylbutan-2-one

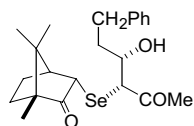
$[\alpha]_D^{20} = +70.0$ (*c* 2.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{22}H_{30}O_3Se$

(3*R*,4*S*)-3-(Camphorseleno)-4-hydroxy-6-phenylhexan-2-one

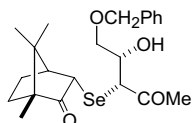
$[\alpha]_D^{21} = +47.3$ (*c* 2.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{22}H_{30}O_4Se$

(3*R*,4*S*)-5-(Benzyloxy)-3-(camphorseleno)-4-hydroxypentan-2-one

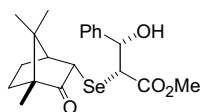
$[\alpha]_D^{22} = +49.3$ (*c* 1.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{20}H_{26}O_4Se$

Methyl (2*R*,3*S*)-2-(camphorseleno)-3-hydroxy-3-phenylpropanoate

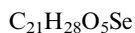
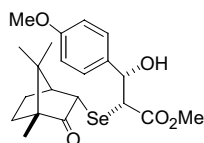
$[\alpha]_D^{25} = -41.2$ (*c* 1.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



Methyl (2*R*,3*S*)-2-(camphorseleno)-3-hydroxy-3-(4-methoxyphenyl)propanoate

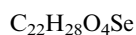
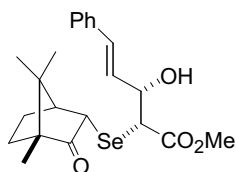
$[\alpha]_D^{26} = -40.4$ (c 2.0, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



Methyl (2*R*,3*S*,4*E*)-2-(camphorseleno)-3-hydroxy-5-phenylpent-4-enoate

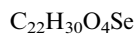
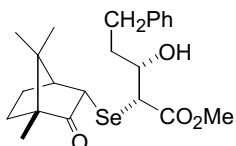
$[\alpha]_D^{23} = -58.1$ (c 1.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



Methyl (2*R*,3*S*)-2-(camphorseleno)-3-hydroxy-5-phenylpentanoate

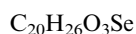
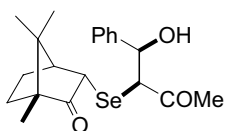
$[\alpha]_D^{17} = -41.6$ (c 3.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



(3*S*,4*R*)-3-(Camphorseleno)-4-hydroxy-4-phenylbutan-2-one

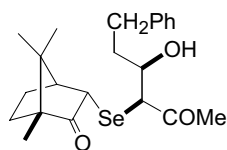
$[\alpha]_D^{22} = -125.0$ (c 0.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

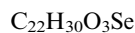
Tetrahedron: Asymmetry 15 (2004) 783



$$[\alpha]_D^{24} = -105.7 (c 0.4, \text{CHCl}_3)$$

Source of chirality: asymmetric synthesis

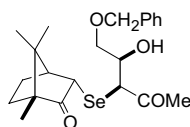
Absolute configuration: 3*S*,4*R*



(3*S*,4*R*)-3-(Camphorseleno)-4-hydroxy-6-phenylhexan-2-one

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

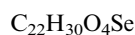
Tetrahedron: Asymmetry 15 (2004) 783



$$[\alpha]_D^{24} = -64.9 (c 0.5, \text{CHCl}_3)$$

Source of chirality: asymmetric synthesis

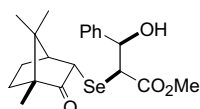
Absolute configuration: 3*S*,4*R*



(3*S*,4*R*)-5-(Benzyloxy)-3-(camphorseleno)-4-hydroxypentan-2-one

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

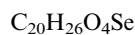
Tetrahedron: Asymmetry 15 (2004) 783



$$[\alpha]_D^{26} = -86.4 (c 2.5, \text{CHCl}_3)$$

Source of chirality: asymmetric synthesis

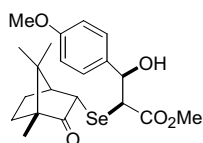
Absolute configuration: 2*S*,3*R*



Methyl (2*S*,3*R*)-2-(camphorseleno)-3-hydroxy-3-phenylpropanoate

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

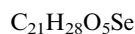
Tetrahedron: Asymmetry 15 (2004) 783



$$[\alpha]_D^{26} = -51.3 (c 1.3, \text{CHCl}_3)$$

Source of chirality: asymmetric synthesis

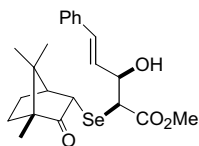
Absolute configuration: 2*S*,3*R*



Methyl (2*S*,3*R*)-2-(camphorseleno)-3-hydroxy-3-(4-methoxyphenyl)propanoate

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{22}H_{28}O_4Se$

Methyl (2*S*,3*R*,4*E*)-2-(camphorseleno)-3-hydroxy-5-phenylpent-4-enoate

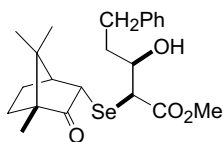
$[\alpha]_D^{24} = -50.4$ (*c* 2.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{22}H_{30}O_4Se$

Methyl (2*S*,3*R*)-2-(camphorseleno)-3-hydroxy-5-phenylpentanoate

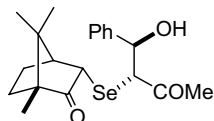
$[\alpha]_D^{19} = -79.5$ (*c* 1.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Tetrahedron: Asymmetry 15 (2004) 783



$C_{20}H_{26}O_3Se$

(3*R*,4*R*)-3-(Camphorseleno)-4-hydroxy-4-phenylbutan-2-one

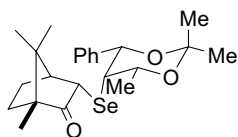
$[\alpha]_D^{24} = +56.1$ (*c* 0.9, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{23}H_{32}O_3Se$

(4*R*,5*S*,6*S*)-5-(Camphorseleno)-2,2,4-trimethyl-6-phenyl-1,3-dioxane

M.p. 90–91 °C

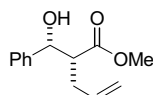
$[\alpha]_D^{19} = -113.5$ (*c* 1.7, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 4*R*,5*S*,6*S*

Marcello Tiecco,* Lorenzo Testaferri, Francesca Marini,
Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{13}H_{16}O_3$

Methyl (2*R*)-2-[(*R*)-hydroxy(phenyl)methyl]pent-4-enoate

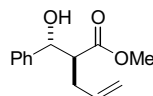
$[\alpha]_D^{24} = +8.0$ (*c* 0.8, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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Silvia Sternativo, Claudio Santi, Luana Bagnoli and Andrea Temperini

Tetrahedron: Asymmetry 15 (2004) 783



$C_{13}H_{16}O_3$

Methyl (2*S*)-2-[(*R*)-hydroxy(phenyl)methyl]pent-4-enoate

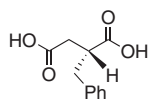
$[\alpha]_D^{25} = +26.7$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Gary P. Reid, Kieron W. Brear and David J. Robins*

Tetrahedron: Asymmetry 15 (2004) 793



$C_{11}H_{12}O_4$

(2*R*)-2-Benzylsuccinic acid

Ee 92%

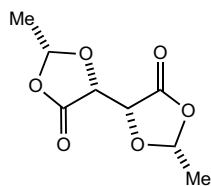
$[\alpha]_D = +17.7$ (*c* 2.9, EtOAc)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*R*

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



$C_8H_{10}O_6$

(2*R*,2'*R*,5*R*,5'*R*)-2,2'-Dimethyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

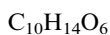
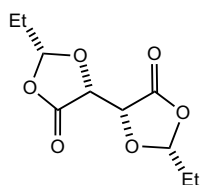
$[\alpha]_D^{25} = +96$ (*c* 1, ethylacetate)

Source of chirality: (*R,R*)-tartaric acid

Absolute configuration: 2*R*,2'*R*,5*R*,5'*R*

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



(2*R*,2'*R*,5*R*,5'*R*)-2,2'-Diethyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

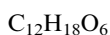
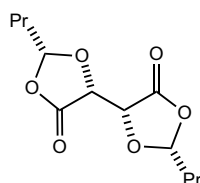
$[\alpha]_D^{25} = +35$ (*c* 0.64, CH_2Cl_2)

Source of chirality: (*R,R*)-tartaric acid

Absolute configuration: 2*R*,2'*R*,5*R*,5'*R*

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



(2*R*,2'*R*,5*R*,5'*R*)-2,2'-Dipropyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

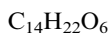
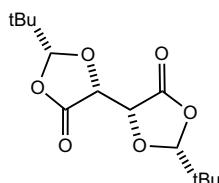
$[\alpha]_D^{25} = +61$ (*c* 0.64, CH_2Cl_2)

Source of chirality: (*R,R*)-tartaric acid

Absolute configuration: 2*R*,2'*R*,5*R*,5'*R*

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



(2*R*,2'*R*,5*R*,5'*R*)-2,2'-Ditertbutyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

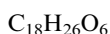
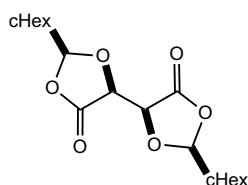
$[\alpha]_D^{25} = +18$ (*c* 1, Et_2O)

Source of chirality: (*R,R*)-tartaric acid

Absolute configuration: 2*R*,2'*R*,5*R*,5'*R*

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Tetrahedron: Asymmetry 15 (2004) 803



(2*S*,2'*S*,5*S*,5'*S*)-2,2'-Dicyclohexyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

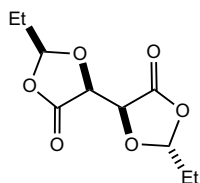
$[\alpha]_D^{25} = -46$ (*c* 1, CH_2Cl_2)

Source of chirality: (*S,S*)-tartaric acid

Absolute configuration: 2*S*,2'*S*,5*S*,5'*S*

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



$C_{10}H_{14}O_6$

(2*S*,2'*R*,5*S*,5'*S*)-2,2'-Diethyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

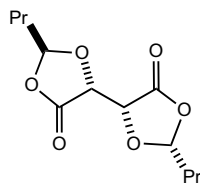
$[\alpha]_D^{25} = -65$ (*c* 1.04, CH_2Cl_2)

Source of chirality: (*S,S*)-tartaric acid

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

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Tetrahedron: Asymmetry 15 (2004) 803



$C_{12}H_{18}O_6$

(2*S*,2'*R*,5*R*,5'*R*)-2,2'-Dipropyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

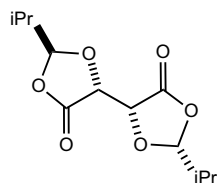
$[\alpha]_D^{25} = +33$ (*c* 0.04, CH_2Cl_2)

Source of chirality: (*R,R*)-tartaric acid

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

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



$C_{12}H_{18}O_6$

(2*S*,2'*R*,5*R*,5'*R*)-2,2'-Diisopropyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

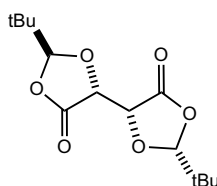
$[\alpha]_D^{25} = +38$ (*c* 0.16, CH_2Cl_2)

Source of chirality: (*R,R*)-tartaric acid

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

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



$C_{14}H_{22}O_6$

(2*S*,2'*R*,5*R*,5'*R*)-2,2'-Ditertbutyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

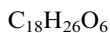
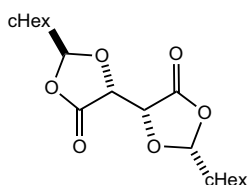
$[\alpha]_D^{25} = +49$ (*c* 0.26, CH_2Cl_2)

Source of chirality: (*R,R*)-tartaric acid

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

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



(2*S*,2'*R*,5*R*,5'*R*)-2,2'-Dicyclohexyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

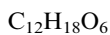
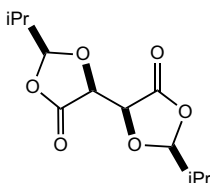
$$[\alpha]_D^{25} = +24 \text{ (} c \text{ 0.26, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (*R,R*)-tartaric acid

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

Morris Markert, Ingo Buchem, Hannes Krüger and Rainer Mahrwald*

Tetrahedron: Asymmetry 15 (2004) 803



(2*S*,2'*S*,5*S*,5'*S*)-2,2'-Diisopropyl-5,5'-bis(1,3-dioxolane-4,4'-dione)

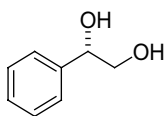
$$[\alpha]_D^{25} = -50 \text{ (} c \text{ 0.8, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (*S,S*)-tartaric acid

Absolute configuration: 2*S*,2'*S*,5*S*,5'*S*

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-Phenyl-ethane-1,2-diol

Ee = 96%

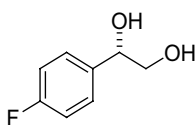
$$[\alpha]_D^{20} = +66.7 \text{ (} c \text{ 1.05, CHCl}_3\text{)}$$

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-(4-Fluoro-phenyl)-ethane-1,2-diol

Ee = 97%

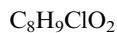
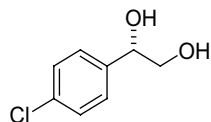
$$[\alpha]_D^{20} = 57.2 \text{ (} c \text{ 0.996, CHCl}_3\text{)}$$

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-(4-Chloro-phenyl)-ethane-1,2-diol

Ee = 98%

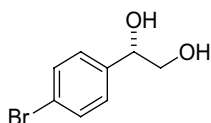
$[\alpha]_D^{22} = +57.8$ (c 1.082, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-(4-Bromo-phenyl)-ethane-1,2-diol

Ee = 94%

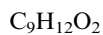
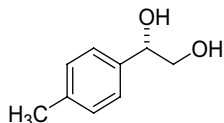
$[\alpha]_D^{17} = +33.3$ (c 2.134, acetone)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-*p*-Tolyl-ethane-1,2-diol

Ee = 95%

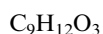
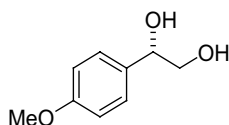
$[\alpha]_D^{16} = +66$ (c 0.934, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



1-(4-Methoxy-phenyl)-ethane-1,2-diol

Ee = 95%

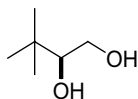
$[\alpha]_D^{16} = +63.1$ (c 0.914, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₆H₁₄O₂

3,3-Dimethyl-butane-1,2-diol

Ee = 94%

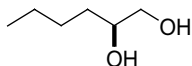
$[\alpha]_D^{12} = +13.1$ (c 0.731, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₆H₁₄O₂

1,2-Hexane-diol

Ee = 45%

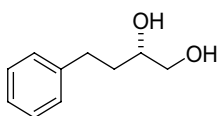
$[\alpha]_D^9 = -6.1$ (c 1.30, ethanol)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₁₀H₁₄O₂

4-Phenyl-butane-1,2-diol

Ee = 62%

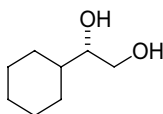
$[\alpha]_D^{17} = -11.3$ (c 0.702, ethanol)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₈H₁₆O₂

cyclo-Hexyl-ethane-1,2-diol

Ee = 86%

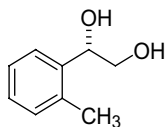
$[\alpha]_D^{20} = +4.4$ (c 1.068, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (S)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₉H₁₂O₂

1-*o*-Tolyl-ethane-1,2-diol

Ee = 75%

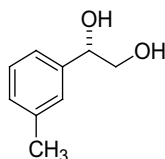
[α]_D²⁰ = +57.9 (*c* 1.195, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (*S*)

Guang-yin Wang, Jian-bing Hu and Gang Zhao*

Tetrahedron: Asymmetry 15 (2004) 807



C₉H₁₂O₂

1-*m*-Tolyl-ethane-1,2-diol

Ee = 94%

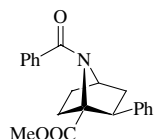
[α]_D²⁰ = +55.2 (*c* 2.25, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: undetermined

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



C₂₁H₂₁NO₃

Methyl (1*S*,2*S*,4*R*)-*N*-benzoyl-2-phenyl-7-azabicyclo[2.2.1]heptane-1-carboxylate

Ee >98%

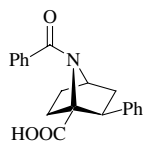
[α]_D²⁵ = +52.9 (*c* 1.0, CHCl₃)

Source of chirality: resolution by chiral HPLC

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

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



C₂₀H₁₉NO₃

(1*S*,2*S*,4*R*)-*N*-Benzoyl-2-phenyl-7-azabicyclo[2.2.1]heptane-1-carboxylic acid

Ee >98%

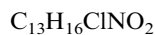
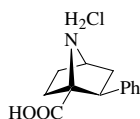
[α]_D²⁵ = +82.6 (*c* 0.5, CHCl₃)

Source of chirality: resolution by chiral HPLC

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

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

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(1*S*,2*S*,4*R*)-2-Phenyl-7-azabicyclo[2.2.1]heptane-1-carboxylic acid hydrochloride

Ee >98%

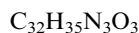
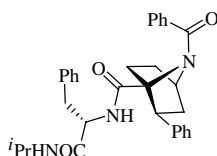
$[\alpha]_D^{25} = -23.8$ (c 0.5, $CHCl_3$)

Source of chirality: resolution by chiral HPLC

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

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Tetrahedron: Asymmetry 15 (2004) 811



(1*S*,2*S*,4*R*)-*N*-Benzoyl-2-phenyl-7-azabicyclo[2.2.1]heptane-1-carbonyl-(*S*)-*N'*-isopropylphenylalaninamide

Ee >98%

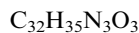
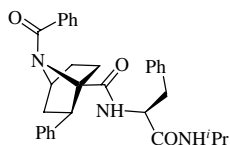
$[\alpha]_D^{25} = +96.2$ (c 0.5, $CHCl_3$)

Source of chirality: resolution by chiral HPLC

Absolute configuration: (1*S*,2*S*,4*R*)-(*S*)

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



(1*R*,2*R*,4*S*)-*N*-Benzoyl-2-phenyl-7-azabicyclo[2.2.1]heptane-1-carbonyl-(*S*)-*N'*-isopropylphenylalaninamide

Ee >98%

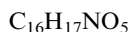
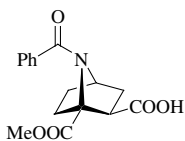
$[\alpha]_D^{25} = -44.7$ (c 0.36, $CHCl_3$)

Source of chirality: resolution by chiral HPLC

Absolute configuration: (1*R*,2*R*,4*S*)-(*S*)

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

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(1*S*,2*R*,4*R*)-*N*-Benzoyl-1-carbomethoxy-7-azabicyclo[2.2.1]heptane-2-carboxylic acid

Ee >98%

$[\alpha]_D^{25} = -18.8$ (c 0.5, $CHCl_3$);

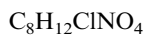
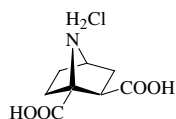
$[\alpha]_D^{25} = -24.1$ (c 0.2, MeOH)

Source of chirality: resolution by chiral HPLC

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

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



(1*S*,2*R*,4*R*)-7-Azabicyclo[2.2.1]heptane-1,2-dicarboxylic acid hydrochloride

Ee >98%

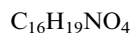
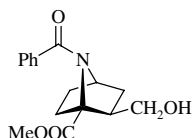
$[\alpha]_D^{25} = -28.0$ (c 0.20, H₂O)

Source of chirality: resolution by chiral HPLC

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

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



Methyl (1*S*,2*R*,4*R*)-*N*-benzoyl-2-hydroxymethyl-7-azabicyclo[2.2.1]heptane-1-carboxylate

Ee >98%

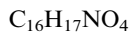
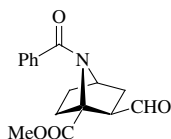
$[\alpha]_D^{25} = -40.7$ (c 1.0, CHCl₃)

Source of chirality: resolution by chiral HPLC

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

Ana M. Gil, Elena Buñuel,* Pilar López and Carlos Cativiela*

Tetrahedron: Asymmetry 15 (2004) 811



Methyl (1*S*,2*R*,4*R*)-*N*-benzoyl-2-formyl-7-azabicyclo[2.2.1]heptane-1-carboxylate

Ee >98%

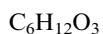
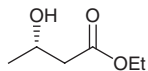
$[\alpha]_D^{25} = -7.1$ (c 1.0, CHCl₃)

Source of chirality: resolution by chiral HPLC

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

Andrew J. Carnell,* Robert Head, Derek Bassett and Michael Schneider

Tetrahedron: Asymmetry 15 (2004) 821



Ethyl (*S*)-3-hydroxybutyrate

Ee >98%

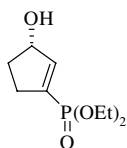
$[\alpha]_D = -44.5$ (c 1, CHCl₃)

Source of chirality: stereoinversion of (*R*)-mesylate

Absolute configuration: 3(*S*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₉H₁₇O₄P

(-)-(3*S*)-Diethyl 3-hydroxy-1-cyclopentenyl phosphonate

Ee >99% (by HPLC)

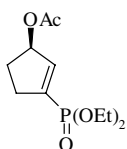
[α]_D²⁰ = -49.8 (c 0.47, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₁₁H₁₉O₅P

(+)-(3*R*)-Diethyl 3-acetoxy-1-cyclopentenyl phosphonate

Ee = 84% (by HPLC)

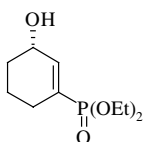
[α]_D²⁰ = +94.1 (c 0.49, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₁₀H₁₉O₄P

(-)-(3*S*)-Diethyl 3-hydroxy-1-cyclohexenyl phosphonate

Ee >99% (by HPLC)

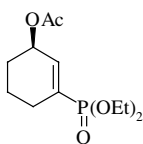
[α]_D²⁰ = -34.6 (c 0.50, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₁₂H₂₁O₅P

(+)-(3*R*)-Diethyl 3-acetoxy-1-cyclohexenyl phosphonate

Ee >99% (by HPLC)

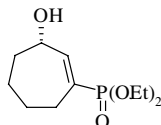
[α]_D²⁰ = +91.3 (c 0.51, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₁₁H₂₁O₄P

(+)-(3*S*)-Diethyl 3-hydroxy-1-cycloheptenyl phosphonate

Ee >99% (by HPLC)

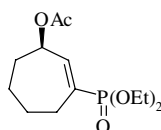
[α]_D²⁰ = +9.9 (c 0.49, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₁₃H₂₃O₅P

(+)-(3*R*)-Diethyl 3-acetoxy-1-cycloheptenyl phosphonate

Ee >99% (by HPLC)

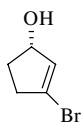
[α]_D²⁰ = +15.5 (c 0.50, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*R*)

Mireille Attolini, Gilles Iacazio, Gilbert Peiffer, Yolande Charmasson and Michel Maffei*

Tetrahedron: Asymmetry 15 (2004) 827



C₅H₇BrO

(-)-(3*S*)-3-Bromo-1-cyclopentenol

Ee = 61% (by correlation)

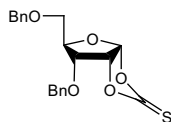
[α]_D²⁰ = -38.4 (c 0.59, CH₂Cl₂)

Source of chirality: enzymatic resolution

Absolute configuration: (*S*)

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



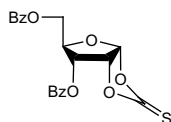
C₂₀H₂₀O₅S

3,5-Di-*O*-benzyl-1,2-*O*-thiocarbonyl- α -D-ribo-furanose

[α]_D²³ = +200 (c 1, CH₂Cl₂)

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



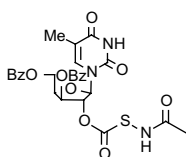
$$[\alpha]_D^{23} = +170 (c 1, \text{CH}_2\text{Cl}_2)$$



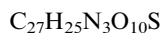
3,5-Di-O-benzoyl-1,2-O-thiocarbonyl- α -D-ribo-furanose

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



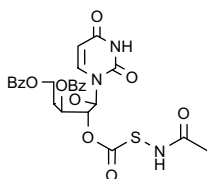
$$[\alpha]_D^{23} = +164 (c 1, \text{CH}_2\text{Cl}_2)$$



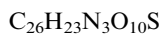
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-xylo-furanosyl)thymine

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



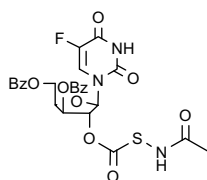
$$[\alpha]_D^{23} = +147 (c 1, \text{CH}_2\text{Cl}_2)$$



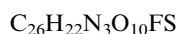
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-xylo-furanosyl)uracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



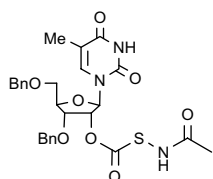
$$[\alpha]_D^{23} = +156 (c 1, \text{CH}_2\text{Cl}_2)$$



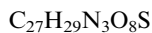
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-xylo-furanosyl)-5-fluoruracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



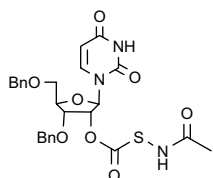
$$[\alpha]_D^{23} = +67 (c 1, \text{CH}_2\text{Cl}_2)$$



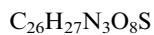
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzyl- β -D-ribo-furanosyl)thymine

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



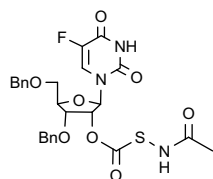
$$[\alpha]_D^{23} = +92 (c 1, \text{CH}_2\text{Cl}_2)$$



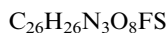
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzyl- β -D-ribo-furanosyl)uracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



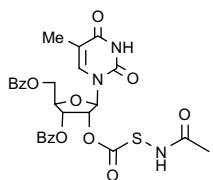
$$[\alpha]_D^{23} = +98 (c 1, \text{CH}_2\text{Cl}_2)$$



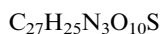
1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzyl- β -D-ribo-furanosyl)-5-fluoruracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos
and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



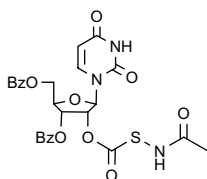
$$[\alpha]_D^{23} = -59 (c 1, \text{CH}_2\text{Cl}_2)$$



1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-ribo-furanosyl)thymine

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



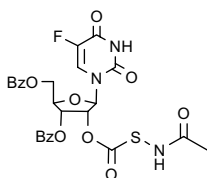
Mp 171–172 °C
[α]_D²³ = –43 (c 1, CH₂Cl₂)

C₂₆H₂₃N₃O₁₀S

1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-ribo-furanosyl)uracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



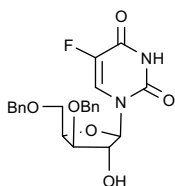
Mp 202–203 °C
[α]_D²³ = –32 (c 1, CH₂Cl₂)

C₂₆H₂₂N₃O₁₀FS

1-(2'-O-Acetamidomercaptocarbonyl-3',5'-di-O-benzoyl- β -D-ribo-furanosyl)-5-fluorouracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



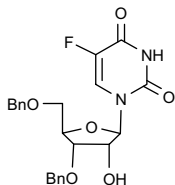
Mp 103–104 °C
[α]_D²³ = –4 (c 6, CH₂Cl₂)

C₂₃H₂₃N₂O₆F

1-(3',5'-Di-O-benzyl- β -D-xylo-furanosyl)-5-fluorouracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



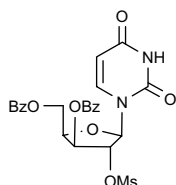
[α]_D²³ = +19 (c 1, CH₂Cl₂)

C₂₃H₂₃N₂O₆F

1-(3',5'-Di-O-benzyl- β -D-ribo-furanosyl)-5-fluorouracil

Rafael Robles,* Concepción Rodríguez, Luis Álvarez de Cienfuegos and Antonio J. Mota

Tetrahedron: Asymmetry 15 (2004) 831



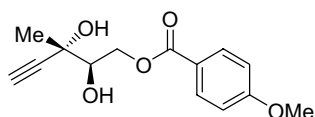
Mp 63–64 °C
[α]_D²³ = +64 (c 1, acetone)

C₂₄H₂₂N₂O₁₀S

1-(3',5'-Di-*O*-benzoyl-2'-*O*-mesyl- β -D-xylo-furanosyl)uracil

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



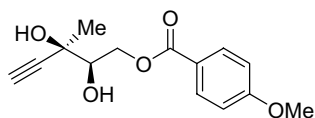
Ee = 95%
[α]_D²⁴ = +32.9 (c 0.37, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

C₁₄H₁₆O₅

(2*R*,3*S*)-2,3-Dihydroxy-3-methylpent-4-yn-1-yl *p*-methoxybenzoate

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



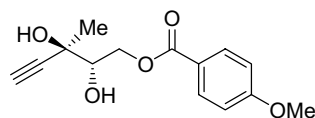
Ee = 94%
[α]_D²⁴ = +29.9 (c 1.27, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*R*

C₁₄H₁₆O₅

(2*R*,3*R*)-2,3-Dihydroxy-3-methylpent-4-yn-1-yl *p*-methoxybenzoate

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



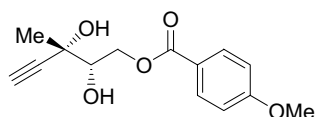
Ee = 87%
[α]_D²⁴ = -25.6 (c 0.42, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*R*

C₁₄H₁₆O₅

(2*S*,3*R*)-2,3-Dihydroxy-3-methylpent-4-yn-1-yl *p*-methoxybenzoate

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



$C_{14}H_{16}O_5$

(2*S*,3*S*)-2,3-Dihydroxy-3-methylpent-4-yn-1-yl *p*-methoxybenzoate

$E_e = 96\%$

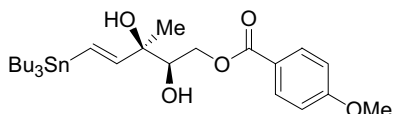
$[\alpha]_D^{24} = -28.7$ (c 0.74, MeOH)

Source of chirality: asymmetric synthesis

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

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



$C_{16}H_{44}O_5Sn$

(2*R*,3*R*,4*E*)-2,3-Dihydroxy-3-methyl-5-(tri-*n*-butylstannyl)-pent-4-yn-1-yl *p*-methoxybenzoate

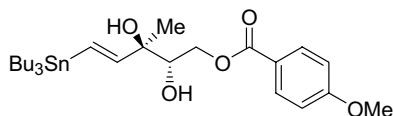
$[\alpha]_D^{24} = +12.5$ (c 0.008, MeOH)

Source of chirality: asymmetric synthesis

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

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



$C_{26}H_{44}O_5Sn$

(2*S*,3*R*,4*E*)-2,3-Dihydroxy-3-methyl-5-(tri-*n*-butylstannyl)-pent-4-yn-1-yl *p*-methoxybenzoate

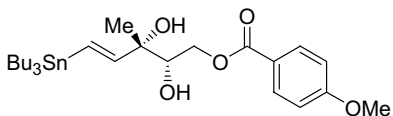
$[\alpha]_D^{24} = -14.8$ (c 0.027, MeOH).

Source of chirality: asymmetric synthesis

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

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



$C_{26}H_{44}O_5Sn$

(2*S*,3*S*,4*E*)-2,3-Dihydroxy-3-methyl-5-(tri-*n*-butylstannyl)-pent-4-yn-1-yl *p*-methoxybenzoate

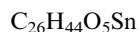
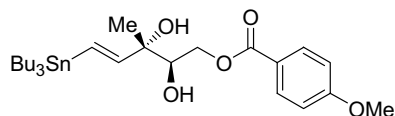
$[\alpha]_D^{24} = -24.9$ (c 0.15, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*,3*S*,4*E*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(2*R*,3*S*,4*E*)-2,3-Dihydroxy-3-methyl-5-(tri-*n*-butylstannyl)-pent-4-yn-1-yl *p*-methoxybenzoate

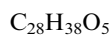
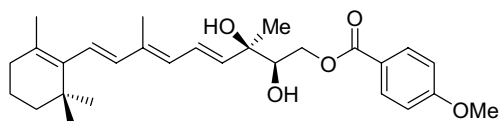
$[\alpha]_D^{24} = +20.8$ (*c* 0.24, MeOH)

Source of chirality: asymmetric synthesis

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

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*R*,14*R*)-13,14-Dihydroxyretinol *p*-methoxybenzoate

Ee = 94%

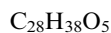
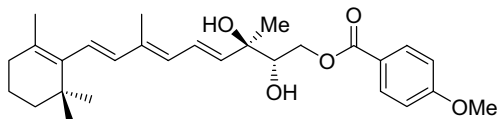
$[\alpha]_D^{24} = +14.9$ (*c* 0.003, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*R*,14*R*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*R*,14*S*)-13,14-Dihydroxyretinol *p*-methoxybenzoate

Ee = 88%

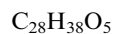
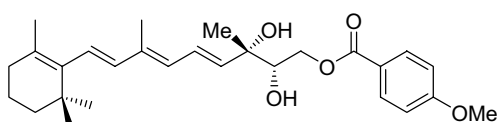
$[\alpha]_D^{24} = -22.7$ (*c* 0.022, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*R*,14*S*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*S*,14*S*)-13,14-Dihydroxyretinol *p*-methoxybenzoate

Ee = 96%

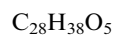
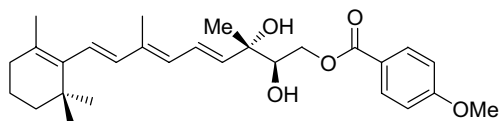
$[\alpha]_D^{24} = -16.6$ (*c* 0.036, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*S*,14*S*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*S*,14*R*)-13,14-Dihydroxyretinol *p*-methoxybenzoate

$E_e = 94\%$

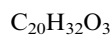
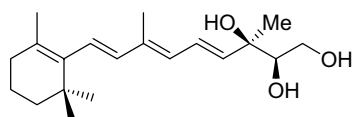
$[\alpha]_D^{24} = +27.7$ (*c* 0.018, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*S*,14*R*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*R*,14*R*)-13,14-Dihydroxyretinol

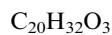
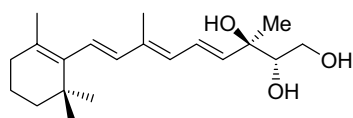
$[\alpha]_D^{24} = -11.5$ (*c* 0.026, MeOH).

Source of chirality: asymmetric synthesis

Absolute configuration: 13*R*,14*R*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*R*,14*S*)-13,14-Dihydroxyretinol

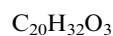
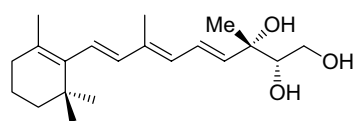
$[\alpha]_D^{24} = +9.9$ (*c* 0.04, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*R*,14*S*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



(13*S*,14*S*)-13,14-Dihydroxyretinol

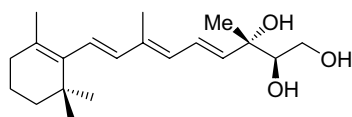
$[\alpha]_D^{24} = +14.3$ (*c* 0.06, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*S*,14*S*

Susana Alvarez, Rosana Alvarez and Angel R. de Lera*

Tetrahedron: Asymmetry 15 (2004) 839



$C_{20}H_{32}O_3$

(13*S*,14*R*)-13,14-Dihydroxyretinol

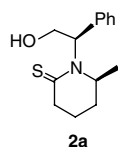
$[\alpha]_D^{24} = -13.3$ (*c* 0.03, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 13*S*,14*R*

Luis F. Roa, Dino Gnecco,* Alberto Galindo, Joel L. Terán and Sylvain Bernès

Tetrahedron: Asymmetry 15 (2004) 847



$C_{14}H_{19}NOS$

(1'*R*,6*S*)-(-)-1-(2'-Hydroxy-1'-phenyl-ethyl)-6-methyl-piperidine-2-thione

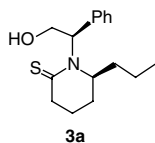
White solid

$[\alpha]_D^{20} = -172.2$ (*c* 1.1, CH_2Cl_2)

Mp = 107–110 °C

Luis F. Roa, Dino Gnecco,* Alberto Galindo, Joel L. Terán and Sylvain Bernès

Tetrahedron: Asymmetry 15 (2004) 847



$C_{16}H_{23}NOS$

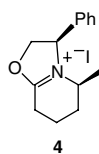
(1'*R*,6*S*)-(-)-1-(2'-Hydroxy-1'-phenyl-ethyl)-6-*n*-propylpiperidine-2-thione

Yellow oil

$[\alpha]_D^{20} = -107.2$ (*c* 3.9, CH_2Cl_2)

Luis F. Roa, Dino Gnecco,* Alberto Galindo, Joel L. Terán and Sylvain Bernès

Tetrahedron: Asymmetry 15 (2004) 847



$C_{14}H_{18}INO$

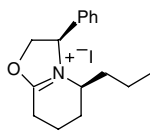
(3*R*,5*S*)-(-)-5-Methyl-3-phenyl-2,3,5,6,7,8-hexahydro-oxazolo[3,2-*a*]pyridin-4-ylum iodide

Yellow oil

$[\alpha]_D^{20} = +11.8$ (*c* 1.0, MeOH)

Luis F. Roa, Dino Gnecco,* Alberto Galindo, Joel L. Terán and Sylvain Bernès

Tetrahedron: Asymmetry 15 (2004) 847



5

C₁₆H₂₂I_{NO}

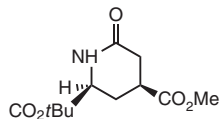
(3*R*,5*S*)-(-)-5-Propyl-3-phenyl-2,3,5,6,7,8-hexahydro-oxazolo[3,2-*a*]pyridin-4-ylum iodide

Yellow oil

[α]_D²⁰ = +9.2 (c 1.0, MeOH)

Johny Wehbe, Valérie Rolland,* Alain Fruchier, Marie-Louise Roumestant and Jean Martinez

Tetrahedron: Asymmetry 15 (2004) 851



C₁₂H₁₈O₅N

2-Hydroxypinan-3-one

Ee = 99.0%

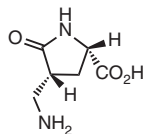
[α]_D²⁰ = -4.2 (c 5.7, C₆D₆)

Source of chirality: (1*R*,2*R*,5*R*)

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

Johny Wehbe, Valérie Rolland,* Alain Fruchier, Marie-Louise Roumestant and Jean Martinez

Tetrahedron: Asymmetry 15 (2004) 851



C₆H₁₂O₄N

2-Hydroxypinan-3-one

Ee = 99.0%

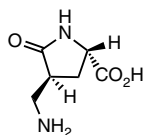
[α]_D²⁰ = -11.2 (c 13.2, CD₃OD)

Source of chirality: (1*R*,2*R*,5*R*)

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

Johny Wehbe, Valérie Rolland,* Alain Fruchier, Marie-Louise Roumestant and Jean Martinez

Tetrahedron: Asymmetry 15 (2004) 851



C₆H₁₂O₄N

2-Hydroxypinan-3-one

Ee = 99.0%

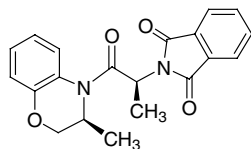
[α]_D²⁰ = +47.3 (c 5.2, CD₃OD)

Source of chirality: (1*R*,2*R*,5*R*)

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

Victor P. Krasnov,* Galina L. Levit, Mikhail I. Kodess,
Valery N. Charushin and Oleg N. Chupakhin

Tetrahedron: Asymmetry 15 (2004) 859



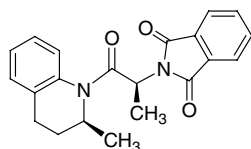
$C_{20}H_{18}N_2O_4$

N-[*N'*-Phthaloyl-(2*S*)-alanyl]-(3*S*)-2,3-dihydro-3-methyl-4*H*-1,4-benzoxazine

De = 99.8% (by HPLC)
[α]_D²⁰ = +331 (*c* 1.3, benzene)
Source of chirality: resolution
Absolute configuration: (2*S*,3'*S*)

Victor P. Krasnov,* Galina L. Levit, Mikhail I. Kodess,
Valery N. Charushin and Oleg N. Chupakhin

Tetrahedron: Asymmetry 15 (2004) 859



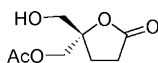
$C_{21}H_{20}N_2O_3$

N-[*N'*-Phthaloyl-(2*S*)-alanyl]-(3*S*)-2,3-methyl-1,2,3,4-tetrahydroquinoline

De = 99.7% (by HPLC)
[α]_D²⁰ = +461 (*c* 1.45, benzene)
Source of chirality: resolution
Absolute configuration: (2*S*,2'*S*)

Robert Chênevert,* Daniel Duguay, Florence Touraille and
Dave Caron

Tetrahedron: Asymmetry 15 (2004) 863



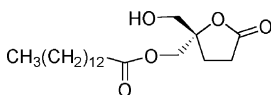
$C_8H_{12}O_5$

(*S*)-5-[(Acetyloxy)methyl]-5-(hydroxymethyl)tetrahydro-2-furanone

Ee = 96%
[α]_D²² = -27.7 (*c* 0.96, C₆H₆)
Source of chirality: enzymatic
desymmetrization
Absolute configuration: *S*

Robert Chênevert,* Daniel Duguay, Florence Touraille and
Dave Caron

Tetrahedron: Asymmetry 15 (2004) 863



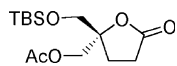
$C_{20}H_{36}O_5$

(*S*)-5-[(Tetradecanoyloxy)methyl]-5-(hydroxymethyl)tetrahydro-2-furanone

Ee ≥ 99%
[α]_D²² = -16.0 (*c* 1.32, C₆H₆)
Source of chirality: enzymatic
desymmetrization
Absolute configuration: *S*

Robert Chênevert,* Daniel Duguay, Florence Touraille and
Dave Caron

Tetrahedron: Asymmetry 15 (2004) 863



C₁₄H₂₆O₅Si

(S)-5-[(Acetyloxy)methyl]-5-[(*tert*-butyldimethylsiloxy)methyl]tetrahydro-2-furanone

Ee = 96%

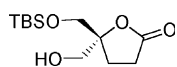
[α]_D²² = -17.9 (c 1.34, C₆H₆)

Source of chirality: enzymatic
desymmetrization

Absolute configuration: *R*

Robert Chênevert,* Daniel Duguay, Florence Touraille and
Dave Caron

Tetrahedron: Asymmetry 15 (2004) 863



C₁₂H₂₄O₄Si

(S)-5-[(*tert*-Butyldimethylsiloxy)methyl]-5-(hydroxymethyl)tetrahydro-2-furanone

Ee = 96%

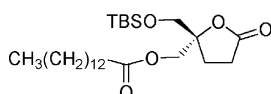
[α]_D²² = -1.1 (c 1.07, C₆H₆)

Source of chirality: enzymatic
desymmetrization

Absolute configuration: *R*

Robert Chênevert,* Daniel Duguay, Florence Touraille and
Dave Caron

Tetrahedron: Asymmetry 15 (2004) 863



C₂₆H₅₀O₅Si

(S)-5-[(*tert*-Butyldimethylsiloxy)methyl]-5-[(tetradecanoyloxy)methyl]tetrahydro-2-furanone

Ee = 96%

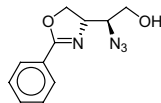
[α]_D²² = -11.6 (c 1.18, C₆H₆)

Source of chirality: enzymatic
desymmetrization

Absolute configuration: *R*

Andreas Scheurer,* Walter Bauer, Frank Hampel, Christine Schmidt,
Rolf W. Saalfrank,* Paul Mosset,* Ralph Puchta and
Nico J. R. van Eikema Hommes

Tetrahedron: Asymmetry 15 (2004) 867



C₁₁H₁₂N₄O₂

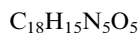
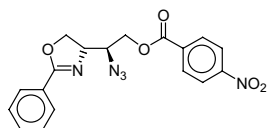
(2*S*)-Azido-2-[2-phenyl-4,5-dihydro-oxazol-(4*S*)-yl]-ethanol

[α]_D²⁵ = -105 (c 1.6, CHCl₃)

Source of chirality: L-tartaric acid
Absolute configuration: (2*S*,4*S*)

Andreas Scheurer,* Walter Bauer, Frank Hampel, Christine Schmidt,
Rolf W. Saalfrank,* Paul Mosset,* Ralph Puchta and
Nico J. R. van Eikema Hommes

Tetrahedron: Asymmetry 15 (2004) 867



p-Nitro-benzoic acid (2*S*)-azido-2-[2-phenyl-4,5-dihydro-oxazol-(4*S*)-yl]-ethyl ester

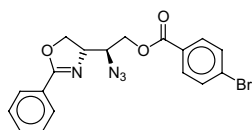
$$[\alpha]_D^{25} = -12.6 (c 1.5, CHCl_3)$$

Source of chirality: L-tartaric acid

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

Andreas Scheurer,* Walter Bauer, Frank Hampel, Christine Schmidt,
Rolf W. Saalfrank,* Paul Mosset,* Ralph Puchta and
Nico J. R. van Eikema Hommes

Tetrahedron: Asymmetry 15 (2004) 867



p-Bromo-benzoic acid (2*S*)-azido-2-[2-phenyl-4,5-dihydro-oxazol-(4*S*)-yl]-ethyl ester

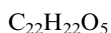
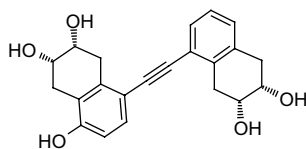
$$[\alpha]_D^{25} = -14.5 (c 2.5, CHCl_3)$$

Source of chirality: L-tartaric acid

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

Thomas G. Back,* Michael A. Bey, Masood Parvez and
Richard P. Pharis

Tetrahedron: Asymmetry 15 (2004) 873



(6*S*,7*R*,6'*S*,7'*R*)-1-[1-(4,6,7-Trihydroxy-5,6,7,8-tetrahydronaphthyl)]-2-[1'-(6',7'-dihydroxy-5',6',7',8'-tetrahydronaphthyl)]-ethyne

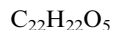
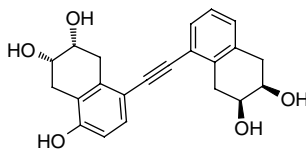
$$[\alpha]_D^{22} = +93.5 (c 0.20, CH_3OH)$$

Source of chirality: resolution of an intermediate

Absolute configuration: (6*S*,7*R*,6'*S*,7'*R*)

Thomas G. Back,* Michael A. Bey, Masood Parvez and
Richard P. Pharis

Tetrahedron: Asymmetry 15 (2004) 873



(6*S*,7*R*,6'*R*,7'*S*)-1-[1-(4,6,7-Trihydroxy-5,6,7,8-tetrahydronaphthyl)]-2-[1'-(6',7'-dihydroxy-5',6',7',8'-tetrahydronaphthyl)]-ethyne

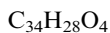
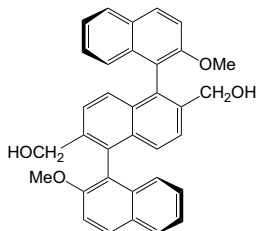
$$[\alpha]_D^{22} = +4.2 (c 0.10, CH_3OH)$$

Source of chirality: resolution of an intermediate

Absolute configuration: (6*S*,7*R*,6'*S*,7'*R*)

Tetsutaro Hattori,* Hiroaki Iwato, Koichi Natori and Sotaro Miyano

Tetrahedron: Asymmetry 15 (2004) 881



(S_a,S_a)-2',6'-Dihydroxymethyl-2,2''-dimethoxy-1,1':5',1''-ternaphthalene

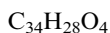
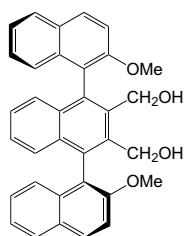
Ee = 100%

$[\alpha]_D^{26} = -23.2$ (c 0.10, $CHCl_3$)

Absolute configuration: (S_a,S_a)

Tetsutaro Hattori,* Hiroaki Iwato, Koichi Natori and Sotaro Miyano

Tetrahedron: Asymmetry 15 (2004) 881



(S_a,S_a)-2',3'-Dihydroxymethyl-2,2''-dimethoxy-1,1':4',1''-ternaphthalene

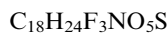
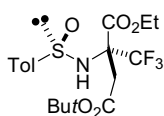
Ee = 100%

$[\alpha]_D^{25} = +16.9$ (c 0.40, $CHCl_3$)

Absolute configuration: (S_a,S_a)

Francesco Lazzaro, Marcello Crucianelli,* Francesco De Angelis, Massimo Frigerio, Luciana Malpezzi, Alessandro Volonterio and Matteo Zanda*

Tetrahedron: Asymmetry 15 (2004) 889



($2R,R_S$)-4-tert-Butyl 1-ethyl N-[(4-methylphenyl)sulfinyl]-2-(trifluoromethyl)aspartate

Ee = 97%

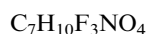
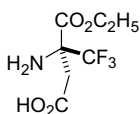
$[\alpha]_D^{20} = -5.3$ (c = 0.43, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: ($2R,R_S$)

Francesco Lazzaro, Marcello Crucianelli,* Francesco De Angelis, Massimo Frigerio, Luciana Malpezzi, Alessandro Volonterio and Matteo Zanda*

Tetrahedron: Asymmetry 15 (2004) 889



(S)- α -Trifluoromethyl aspartic acid α -carboxy ethyl ester

Ee = 97%

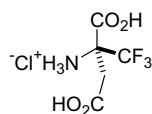
$[\alpha]_D^{20} = +22.4$ (c = 0.52, H_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

Francesco Lazzaro, Marcello Crucianelli,* Francesco De Angelis,
Massimo Frigerio, Luciana Malpezzi, Alessandro Volonterio and
Matteo Zanda*

Tetrahedron: Asymmetry 15 (2004) 889



$C_5H_7ClF_3NO_4$

(*S*)- α -Trifluoromethyl aspartic acid hydrochloride

Ee = 97%

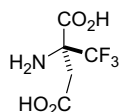
$[\alpha]_D^{20} = +23.5$ ($c = 0.25$, H_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Francesco Lazzaro, Marcello Crucianelli,* Francesco De Angelis,
Massimo Frigerio, Luciana Malpezzi, Alessandro Volonterio and
Matteo Zanda*

Tetrahedron: Asymmetry 15 (2004) 889



$C_5H_6F_3NO_4$

(*S*)- α -Trifluoromethyl aspartic acid

Ee = 97%

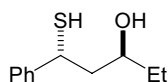
$[\alpha]_D^{20} = +23.5$ ($c = 0.17$, H_2O)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

Minoru Ozeki, Kiyoharu Nishide, Fumiteru Teraoka and
Manabu Node*

Tetrahedron: Asymmetry 15 (2004) 895



$C_{11}H_{16}OS$

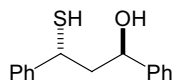
(*1R,3S*)-1-Mercapto-1-phenyl-3-pentanol

$[\alpha]_D^{23} = +120.9$ ($c 0.88$, $CHCl_3$)

99% ee

Minoru Ozeki, Kiyoharu Nishide, Fumiteru Teraoka and
Manabu Node*

Tetrahedron: Asymmetry 15 (2004) 895



$C_{15}H_{16}OS$

(*1R,3R*)-3-Mercapto-1,3-diphenyl-1-propanol

$[\alpha]_D^{25} = +105.7$ ($c 0.77$, $CHCl_3$)

99% ee