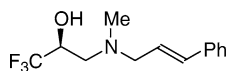


Stereochemistry abstracts

Toshimasa Katagiri,* Naomi Iguchi, Tomomi Kawate, Satoshi Takahashi and Kenji Uneyama

Tetrahedron: Asymmetry 17 (2006) 1157



$C_{13}H_{16}F_3NO$

(2S)-1-{Methyl-[(E)-3-phenyl-2-propenyl]amino}-3,3,3-trifluoropropan-2-ol

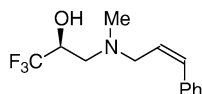
$[\alpha]_D^{25} = -13.7$ (c 1.1, EtOH)

Source of chirality: enantiomerically pure epoxide

Absolute configuration: 2S

Toshimasa Katagiri,* Naomi Iguchi, Tomomi Kawate, Satoshi Takahashi and Kenji Uneyama

Tetrahedron: Asymmetry 17 (2006) 1157



$C_{13}H_{16}F_3NO$

(2S)-1-{Methyl-[(Z)-3-phenyl-2-propenyl]amino}-3,3,3-trifluoropropan-2-ol

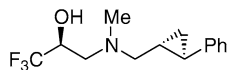
$[\alpha]_D^{25} = -13.5$ (c 1.5, EtOH)

Source of chirality: enantiomerically pure epoxide

Absolute configuration: 2S

Toshimasa Katagiri,* Naomi Iguchi, Tomomi Kawate, Satoshi Takahashi and Kenji Uneyama

Tetrahedron: Asymmetry 17 (2006) 1157



$C_{14}H_{18}F_3NO$

(2S)-1-{Methyl-[(1R,2R)-2-phenyl-cyclopropenyl](methyl)amino}-3,3,3-trifluoropropan-2-ol

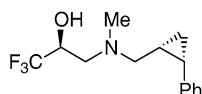
$[\alpha]_D^{25} = -84.2$ (c 1.3, EtOH)

Source of chirality: diastereoselective synthesis (stereochemistry of the cyclopropane ring was confirmed by the specific rotation of the known final product without chiral auxiliary, Ref. 8)

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

Toshimasa Katagiri,* Naomi Iguchi, Tomomi Kawate, Satoshi Takahashi and Kenji Uneyama

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$C_{14}H_{18}F_3NO$

(2S)-1-{Methyl-[(1S,2R)-2-phenyl-cyclopropenyl](methyl)amino}-3,3,3-trifluoropropan-2-ol

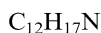
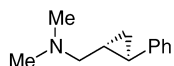
$[\alpha]_D^{25} = -59.0$ (c 1.2, EtOH)

Source of chirality: diastereoselective synthesis [stereochemistry of the cyclopropane ring was confirmed by a X-ray crystallographic analysis (CCDC-602550)]

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

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and Kenji Uneyama

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N,N-Dimethyl-2-phenyl-(1*R*,2*R*)-cyclopropanemethanamine

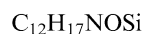
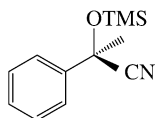
$$[\alpha]_D^{25} = -116 (c 1.5, CHCl_3)$$

Source of chirality: diastereoselective synthesis
(stereochemistry of the compound was confirmed by
the comparison of the specific rotation with that of the
literature, Ref. 8)

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

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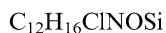
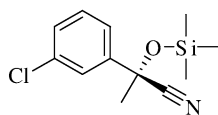
(*R*)-2-Phenyl-2-(trimethylsilyloxy)propanenitrile

$$Ee = 63\%$$

$$[\alpha]_D^{24} = +10.4 (c 1.14, CHCl_3)$$

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Tetrahedron: Asymmetry 17 (2006) 1165



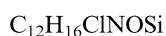
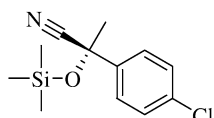
(*R*)-2-(3-Chlorophenyl)-2-(trimethylsilyloxy)propanenitrile

$$Ee = 63\%$$

$$[\alpha]_D^{24} = +11.2 (c 1.3, CHCl_3)$$

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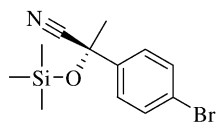
(*R*)-2-(4-Chlorophenyl)-2-(trimethylsilyloxy)propanenitrile

$$Ee = 57\%$$

$$[\alpha]_D^{24} = +12.4 (c 1.68, CHCl_3)$$

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$C_{12}H_{16}BrNOSi$

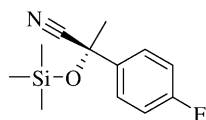
(*R*)-2-(4-Bromophenyl)-2-(trimethylsilyloxy)propanenitrile

Ee = 85%

$[\alpha]_D^{24} = +20.7$ (*c* 1.65, $CHCl_3$)

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$C_{12}H_{16}FNOSi$

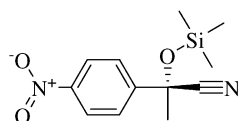
(*R*)-2-(4-Fluorophenyl)-2-(trimethylsilyloxy)propanenitrile

Ee = 60%

$[\alpha]_D^{24} = +15.3$ (*c* 1.4, $CHCl_3$)

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$C_{12}H_{16}N_2O_3Si$

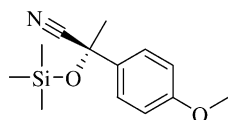
(*R*)-2-(4-Nitrophenyl)-2-(trimethylsilyloxy)propanenitrile

Ee = 50%

$[\alpha]_D^{22} = +8.1$ (*c* 1.62, $CHCl_3$)

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$C_{13}H_{19}NO_2Si$

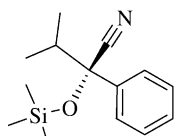
(*R*)-2-(4-Methoxyphenyl)-2-(trimethylsilyloxy)propanenitrile

Ee = 82%

$[\alpha]_D^{20} = +18.2$ (*c* 1.5, $CHCl_3$)

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C₁₄H₂₁NOSi

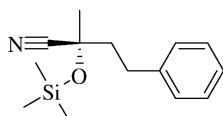
(*R*)-3-Methyl-2-phenyl-2-(trimethylsilyloxy)butanenitrile

Ee = 57%

[α]_D²⁰ = +23.1 (*c* 2.1, CHCl₃)

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C₁₄H₂₁NOSi

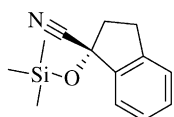
(*R*)-2-Methyl-4-phenyl-2-(trimethylsilyloxy)butanenitrile

Ee = 60%

[α]_D²⁰ = +9.2 (*c* 1.8, CHCl₃)

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C₁₃H₁₇NOSi

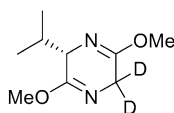
(*R*)-1-(Trimethylsilyloxy)-2,3-dihydro-1*H*-indene-1-carbonitrile

Ee = 58%

[α]_D²³ = +14.4 (*c* 1.4, CHCl₃)

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Tetrahedron: Asymmetry 17 (2006) 1170



C₉H₁₄D₂N₂O₂

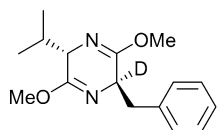
(3*S*)-[6-²H₂]-3-Isopropyl-2,5-dimethoxy-3,6-dihydropyrazine

[α]_D²³ = +72.0 (*c* 1.0, EtOH)

Source of chirality: L-valine

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Tetrahedron: Asymmetry 17 (2006) 1170



$$[\alpha]_{\text{D}}^{25} = -41.2 (c 1.3, \text{CH}_2\text{Cl}_2)$$

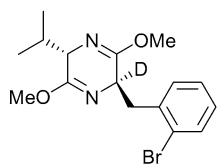
Source of chirality: L-valine



(3*S*,6*R*)-[6-²H]-3-Isopropyl-6-benzyl-2,5-dimethoxy-3,6-dihydropyrazine

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Tetrahedron: Asymmetry 17 (2006) 1170



$$[\alpha]_{\text{D}}^{25} = -7.5 (c 1.0, \text{EtOAc})$$

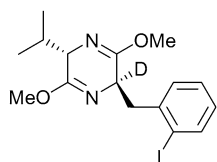
Source of chirality: L-valine



(3*S*,6*R*)-[6-²H]-3-Isopropyl-6-(2-bromobenzyl)-2,5-dimethoxy-3,6-dihydropyrazine

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Tetrahedron: Asymmetry 17 (2006) 1170



$$[\alpha]_{\text{D}}^{25} = -15.5 (c 1.0, \text{EtOAc})$$

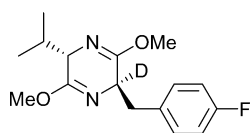
Source of chirality: L-valine



(3*S*,6*R*)-[6-²H]-3-Isopropyl-6-(2-iodobenzyl)-2,5-dimethoxy-3,6-dihydropyrazine

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Tetrahedron: Asymmetry 17 (2006) 1170



$$[\alpha]_{\text{D}}^{27} = -62.4 (c 1.0, \text{EtOAc})$$

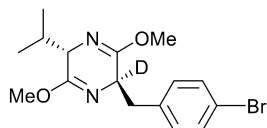
Source of chirality: L-valine



(3*S*,6*R*)-[6-²H]-3-Isopropyl-6-(4-fluorobenzyl)-2,5-dimethoxy-3,6-dihydropyrazine

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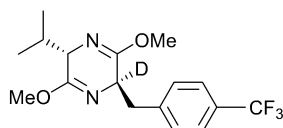


$[\alpha]_D^{25} = -5.2$ (*c* 1.0, EtOAc)
Source of chirality: L-valine

$C_{16}H_{20}DBrN_2O_2$
(3*S*,6*R*)-[6-²H]-3-Isopropyl,6-(4-bromobenzyl)-2,5-dimethoxy-3,6-dihydropyrazine

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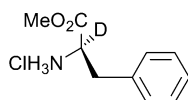


$[\alpha]_D^{25} = -20.7$ (*c* 1.0, EtOAc)
Source of chirality: L-valine

$C_{17}H_{20}DF_3N_2O_2$
(3*S*,6*R*)-[6-²H]-3-Isopropyl,6-(4-trifluoromethylbenzyl)-2,5-dimethoxy-3,6-dihydropyrazine

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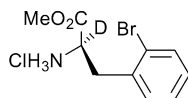


$[\alpha]_D^{25} = -28.3$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{10}H_{13}DCINO_2$
(*R*)- α -[²H]-Phenylalanine methyl ester hydrochloride

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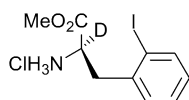


$[\alpha]_D^{25} = -20.1$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{10}H_{12}DBrClNO_2$
(*R*)- α -[²H]-2-Bromophenylalanine methyl ester hydrochloride

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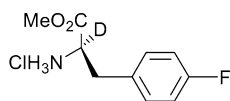


$[\alpha]_D^{25} = -13.3$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{10}H_{12}DCIINO_2$
(*R*)- α -[2H]-2-Iodophenylalanine methyl ester hydrochloride

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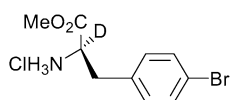


$[\alpha]_D^{25} = -34.3$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{10}H_{12}DCIFNO_2$
(*R*)- α -[2H]-4-Fluorophenylalanine methyl ester hydrochloride

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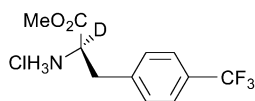


$[\alpha]_D^{25} = -18.5$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{10}H_{12}DBrClNO_2$
(*R*)- α -[2H]-4-Bromophenylalanine methyl ester hydrochloride

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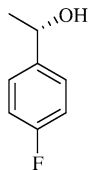


$[\alpha]_D^{25} = -24.8$ (*c* 1.0, EtOH)
Source of chirality: L-valine

$C_{11}H_{12}DCIF_3NO_2$
(*R*)- α -[2H]-4-Trifluoromethylphenylalanine methyl ester hydrochloride

Takamitsu Utsukihara, Osami Misumi, Nakahide Kato,
Tsuneoyoshi Kuroiwa and C. Akira Horiuchi*

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1-(4-Fluorophenyl)ethanol

Ee = 74%

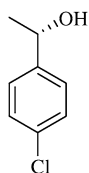
$[\alpha]_{\text{D}}^{27} = -40.0$ (c 0.9, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

Takamitsu Utsukihara, Osami Misumi, Nakahide Kato,
Tsuneoyoshi Kuroiwa and C. Akira Horiuchi*

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1-(4-Chlorophenyl)ethanol

Ee = 96%

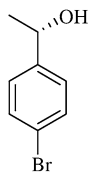
$[\alpha]_{\text{D}}^{27} = -45.0$ (c 0.9, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneoyoshi Kuroiwa and C. Akira Horiuchi*

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1-(4-Bromophenyl)ethanol

Ee = 98%

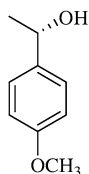
$[\alpha]_{\text{D}}^{27} = -37.3$ (c 1.1, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneoyoshi Kuroiwa and C. Akira Horiuchi*

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1-(4-Methoxyphenyl)ethanol

Ee = 12%

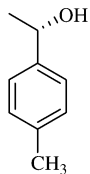
$[\alpha]_{\text{D}}^{27} = -4.2$ (c 0.9, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-(4-Methylphenyl)ethanol

Ee = 16%

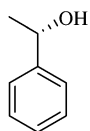
$[\alpha]_D^{27} = -13.0$ (c 0.4, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-Phenylethanol

Ee = 87%

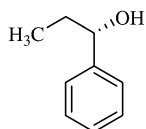
$[\alpha]_D^{27} = -43.7$ (c 0.9, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-Phenyl-1-propanol

Ee = 75%

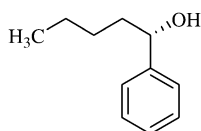
$[\alpha]_D^{27} = -38.1$ (c 1.0, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-Phenyl-1-pentanol

Ee = 80%

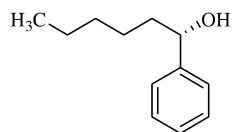
$[\alpha]_D^{27} = -39.3$ (c 0.5, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-Phenyl-1-hexanol

Ee = 59%

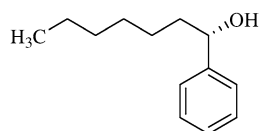
$[\alpha]_D^{27} = -15.6$ (c 1.2, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

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Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

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1-Phenyl-1-heptanol

Ee = 54%

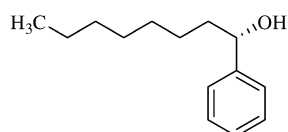
$[\alpha]_D^{27} = -17.6$ (c 1.2, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

Takamitsu Utsukihara, Osami Misumi, Nakahide Kato,
Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

Tetrahedron: Asymmetry 17 (2006) 1179



1-Phenyl-1-octanol

Ee = 37%

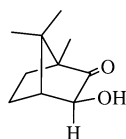
$[\alpha]_D^{27} = -18.3$ (c 0.8, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Absolute configuration: *S*

Takamitsu Utsukihara, Osami Misumi, Nakahide Kato,
Tsuneyoshi Kuroiwa and C. Akira Horiuchi*

Tetrahedron: Asymmetry 17 (2006) 1179



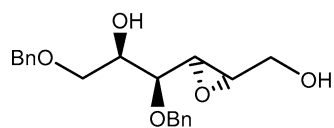
(-)-3*S*-*exo*-Hydroxycamphor

$[\alpha]_D^{27} = -78.4$ (c 1.5, CHCl₃)

Source of chirality: biocatalytic asymmetric reduction

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{20}H_{24}O_5$

(2*S*,3*R*)-4,6-Di-*O*-benzyl-2,3-epoxy-D-galactitol

De >99%

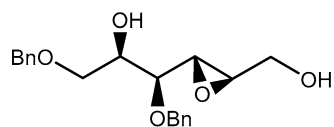
$[\alpha]_D = -26.5$ (*c* 0.170, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{20}H_{24}O_5$

(2*R*,3*S*)-4,6-Di-*O*-benzyl-2,3-epoxy-D-galactitol

De >99%

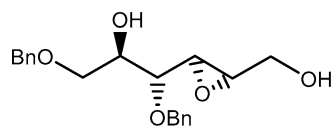
$[\alpha]_D = -16.4$ (*c* 0.073, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{20}H_{24}O_5$

(2*S*,3*R*)-4,6-Di-*O*-benzyl-2,3-epoxy-D-glucitol

De >99%

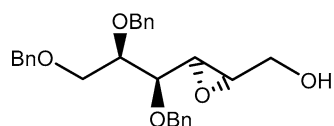
$[\alpha]_D = +12.1$ (*c* 0.066, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{27}H_{30}O_5$

(2*S*,3*R*)-4,5,6-Tri-*O*-benzyl-2,3-epoxy-D-galactitol

De >99%

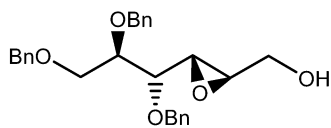
$[\alpha]_D = -20.3$ (*c* 0.123, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{27}H_{30}O_5$

(2*R*,3*S*)-4,5,6-Tri-*O*-benzyl-2,3-epoxy-*D*-glucitol

De >99%

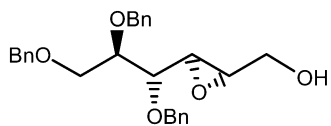
$[\alpha]_D = -22.8$ (*c* 0.136, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{27}H_{30}O_5$

(2*S*,3*R*)-4,5,6-Tri-*O*-benzyl-2,3-epoxy-*D*-glucitol

De >99%

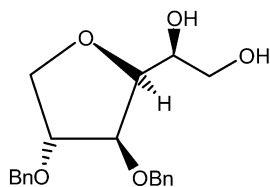
$[\alpha]_D = +10.52$ (*c* 0.057, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{20}H_{24}O_5$

3,6-Anhydro-4,5-di-*O*-benzyl-*D*-galactitol

De >99%

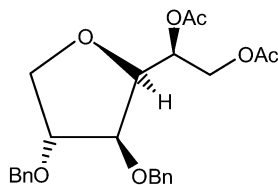
$[\alpha]_D = +25.0$ (*c* 0.140, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



$C_{22}H_{26}O_6$

3,6-Anhydro-1,2-di-*O*-acetyl-4,5-di-*O*-benzyl-*D*-galactitol

De >99%

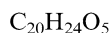
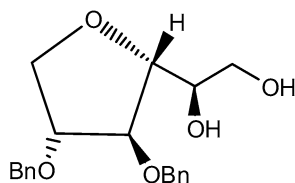
$[\alpha]_D = +15.55$ (*c* 0.090, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



3,6-Anhydro-4,5-di-*O*-benzyl-L-galactitol

De >99%

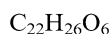
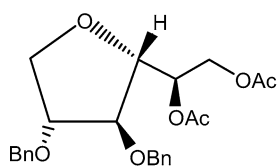
$[\alpha]_D = +2.0$ (*c* 0.100, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ram Sagar, L. Vijaya Raghava Reddy and Arun K. Shaw*

Tetrahedron: Asymmetry 17 (2006) 1189



3,6-Anhydro-1,2-di-*O*-acetyl-4,5-di-*O*-benzyl-L-galactitol

De >99%

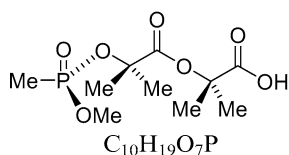
$[\alpha]_D = +19.1$ (*c* 0.068, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Piotr Bałczewski,* Aldona Szadowiak, Tomasz Biały,
Wanda M. Wiczorek and Agnieszka Balińska

Tetrahedron: Asymmetry 17 (2006) 1209



(*R*_{*p*})-(+)-2-(2-(Methoxy(methyl)phosphoryloxy)-2-methylpropanoyloxy)-2-methylpropanoic acid

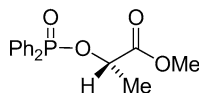
$[\alpha]_D^{25} = +12.3$ (*c* 0.46, $CHCl_3$)

Source of chirality: resolution of racemic mixture

Absolute configuration: (*R*_{*p*})

Piotr Bałczewski,* Aldona Szadowiak, Tomasz Biały,
Wanda M. Wiczorek and Agnieszka Balińska

Tetrahedron: Asymmetry 17 (2006) 1209



(*S*)-(-)-Methyl 2-(diphenylphosphoryloxy)propanoate

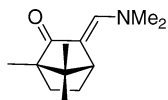
$[\alpha]_D^{22} = -7.4$ (*c* 2.79, CH_2Cl_2)

Source of chirality: chiral substrate

Absolute configuration: (*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{13}H_{21}NO$

(1*S*,3*E*,4*R*)-3-[(Dimethylamino)methylidene]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

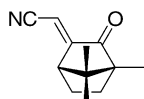
$[\alpha]_D^{21} = -455.7$ (*c* 0.19, CH_2Cl_2)

Source of chirality: (1*S*)-(-)-camphor

Absolute configuration: (1*S*,3*E*,4*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{12}H_{15}NO$

(*E*)-3-[(1*R*,4*S*)-1,7,7-Trimethyl-2-oxobicyclo[2.2.1]heptan-3-ylidene]acetonitrile

De = 100%

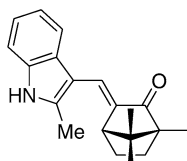
$[\alpha]_D^{23} = +183.7$ (*c* 0.40, CH_2Cl_2)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{20}H_{23}NO$

(1*R*,3*E*,4*S*)-1,7,7-Trimethyl-3-[(2-methyl-1*H*-indol-3-yl)methylidene]bicyclo[2.2.1]heptan-2-one

De = 100%

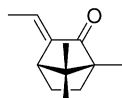
$[\alpha]_D^{22} = +261.9$ (*c* 0.26, CH_2Cl_2)

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

Absolute configuration: (1*R*,3*E*,4*S*)

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Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{12}H_{18}O$

(1*R*,3*E*,4*S*)-3-Ethylidene-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

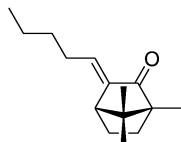
$[\alpha]_D^{21} = +185.1$ (*c* 1.51, $CHCl_3$)

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

Absolute configuration: (1*R*,3*E*,4*S*)

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Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₅H₂₄O

(1*R*,3*E*,4*S*)-3-Pentylidene-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

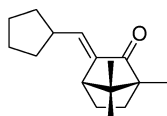
[α]_D²¹ = +158.9 (c 0.53, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

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Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₆H₂₄O

(1*R*,3*E*,4*S*)-3-Cyclopentylmethylidene-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

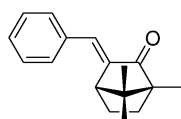
[α]_D²¹ = +162.6 (c 0.83, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₇H₂₀O

(1*R*,3*E*,4*S*)-3-Benzylidene-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

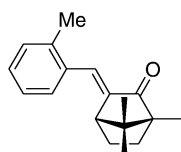
[α]_D²¹ = +446.6 (c 0.30, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₈H₂₂O

(1*R*,3*E*,4*S*)-3-(2-Methylbenzylidene)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

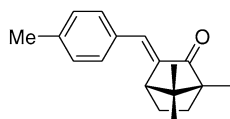
[α]_D²¹ = +397.1 (c 0.24, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₈H₂₂O

(1*R*,3*E*,4*S*)-3-(4-Methylbenzylidene)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

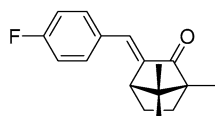
[α]_D²¹ = +458.1 (c 0.28, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₇H₁₉FO

(1*R*,3*E*,4*S*)-3-(4-Fluorobenzylidene)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

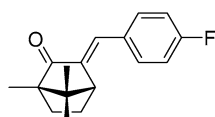
[α]_D²¹ = +413.4 (c 0.19, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₇H₁₉FO

(1*S*,3*E*,4*R*)-3-(4-Fluorobenzylidene)-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

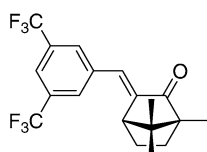
[α]_D²¹ = -399.4 (c 0.34, CHCl₃)

Source of chirality: (1*S*)-(-)-camphor

Absolute configuration: (1*S*,3*E*,4*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₉H₁₈F₆O

(1*R*,3*E*,4*S*)-3-[3,5-Bis(trifluoromethyl)benzylidene]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

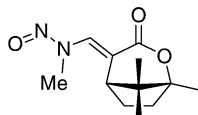
[α]_D²¹ = +242.0 (c 0.27, CHCl₃)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{12}H_{18}N_2O_3$

N-Methyl-*N*-[[*1R,4E,5S*]-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]octan-4-ylidene]methyl]nitrous amide

De = 100%

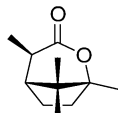
$[\alpha]_D^{22} = +462.3$ (*c* 0.22, CH_2Cl_2)

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

Absolute configuration: (*1R,4E,5S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{11}H_{18}O_2$

(*1R,4R,5R*)-1,4,8,8-Tetramethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 28%

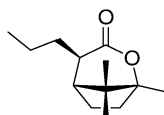
$[\alpha]_D^{19} = -31.4$ (*c* 0.17, $CHCl_3$)

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

Absolute configuration: (*1R,4R,5R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{13}H_{22}O_2$

(*1R,4R,5R*)-4-Propyl-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

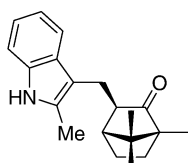
$[\alpha]_D^{23} = -11.9$ (*c* 0.19, $CHCl_3$)

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

Absolute configuration: (*1R,4R,5R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{20}H_{25}NO$

(*1R,3R,4R*)-3-[(2-Methyl-1*H*-indol-3-yl)methyl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

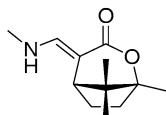
$[\alpha]_D^{23} = +12.1$ (*c* 0.78, $CHCl_3$)

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

Absolute configuration: (*1R,3R,4R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₁₂H₁₉NO₂

(1*R*,4*E*,5*S*)-4-[(Methylamino)methylidene]-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%; *E*:*Z* = 95:5

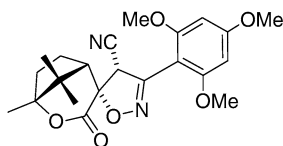
$[\alpha]_D^{22} = +155.9$ (*c* 0.26, CH₂Cl₂)

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

Absolute configuration: (1*R*,4*E*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₂₂H₂₆N₂O₆

(1*R*,4*R*,4'*S*,5*S*)-3'-(2,4,6-Trimethoxyphenyl)-1,8,8-trimethyl-3-oxo-4'*H*-2-oxaspiro[bicyclo[3.2.1]octane-4,5'-isoxazole]-4'-carbonitrile

De = 100%

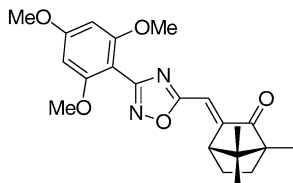
$[\alpha]_D^{22} = -338.3$ (*c* 0.09, CHCl₃)

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

Absolute configuration: (1*R*,4*R*,4'*S*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₂₂H₂₆N₂O₅

(1*R*,3*E*,4*S*)-3-[[3-(2,4,6-Trimethoxyphenyl)-1,2,4-oxadiazol-5-yl]methylidene]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

De = 100%

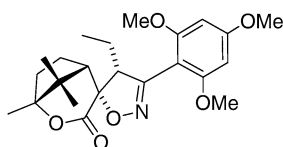
$[\alpha]_D^{21} = -346.6$ (*c* 0.32, CH₂Cl₂)

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

Absolute configuration: (1*R*,3*E*,4*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



C₂₃H₃₁NO₆

(1*R*,4*R*,4'*R*,5*S*)-4'-Ethyl-3'-(2,4,6-trimethoxyphenyl)-1,8,8-trimethyl-4'*H*-2-oxaspiro[bicyclo[3.2.1]octane-4,5'-isoxazol]-3-one

De = 100%

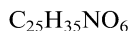
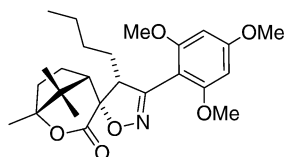
$[\alpha]_D^{23} = -402.2$ (*c* 0.09, CHCl₃)

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

Absolute configuration: (1*R*,4*R*,4'*R*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,4*R*,4'*R*,5*S*)-4'-Butyl-3'-(2,4,6-trimethoxyphenyl)-1,8,8-trimethyl-4'*H*-2-oxaspiro[bicyclo[3.2.1]octane-4,5'-isoxazol]-3-one

De = 100%

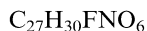
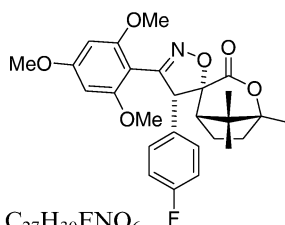
$[\alpha]_D^{23} = -358.7$ (*c* 0.14, $CHCl_3$)

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

Absolute configuration: (1*R*,4*R*,4'*R*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,4*R*,4'*R*,5*S*)-4'-(4-Fluorophenyl)-3'-(2,4,6-trimethoxyphenyl)-1,8,8-trimethyl-4'*H*-2-oxaspiro[bicyclo[3.2.1]octane-4,5'-isoxazol]-3-one

De = 94%

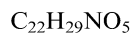
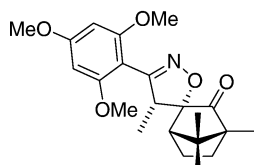
$[\alpha]_D^{21} = -352.9$ (*c* 0.14, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*R*,4'*R*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-1,4',7,7-Tetramethyl-3'-(2,4,6-trimethoxyphenyl)-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

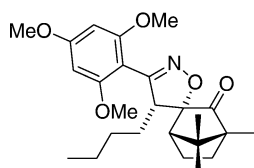
$[\alpha]_D^{19} = -421.3$ (*c* 0.15, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-4'-Butyl-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

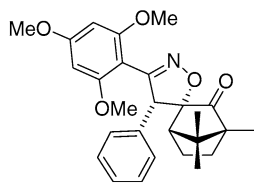
$[\alpha]_D^{19} = -470.5$ (*c* 0.42, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{27}H_{31}NO_5$

(1*R*,3*R*,4*S*,4'*R*)-4'-Phenyl-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

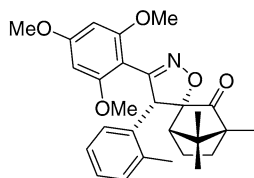
$[\alpha]_D^{21} = -508.9$ (*c* 0.09, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{28}H_{33}NO_5$

(1*R*,3*R*,4*S*,4'*R*)-4'-(2-Methylphenyl)-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 90%

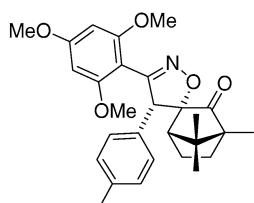
$[\alpha]_D^{21} = -533.6$ (*c* 0.12, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{28}H_{33}NO_5$

(1*R*,3*R*,4*S*,4'*R*)-4'-(4-Methylphenyl)-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

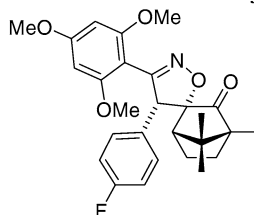
$[\alpha]_D^{19} = -496.4$ (*c* 0.14, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



$C_{27}H_{30}FNO_5$

(1*R*,3*R*,4*S*,4'*R*)-4'-(4-Fluorophenyl)-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

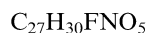
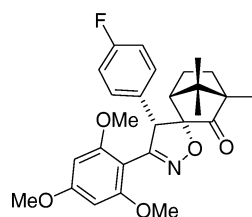
$[\alpha]_D^{21} = -469.9$ (*c* 0.16, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*S*,3*S*,4*R*,4'*S*)-4'-(4-Fluorophenyl)-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

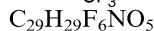
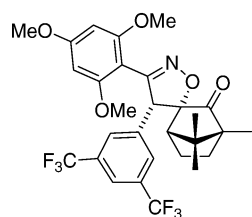
$[\alpha]_D^{21} = +498.9$ (*c* 0.09, $CHCl_3$)

Source of chirality: (1*S*)-(-)-camphor

Absolute configuration: (1*S*,3*S*,4*R*,4'*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-4'-[3,5-Bis(trifluoromethyl)phenyl]-3'-(2,4,6-trimethoxyphenyl)-1,7,7-trimethyl-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 86%

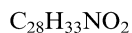
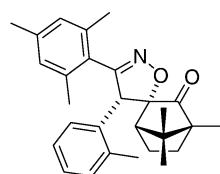
$[\alpha]_D^{21} = -309.3$ (*c* 0.16, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-4'-(2-Methylphenyl)-1,7,7-trimethyl-3'-(2,4,6-trimethylphenyl)-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

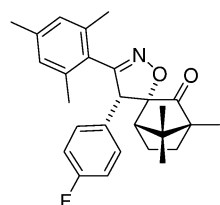
$[\alpha]_D^{21} = -534.4$ (*c* 0.28, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-4'-(4-Fluorophenyl)-1,7,7-trimethyl-3'-(2,4,6-trimethylphenyl)-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

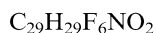
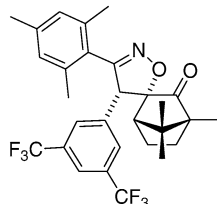
$[\alpha]_D^{21} = -509.7$ (*c* 0.06, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden,
Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry 17 (2006) 1217



(1*R*,3*R*,4*S*,4'*R*)-4'-[3,5-Bis(trifluoromethyl)phenyl]-1,7,7-trimethyl-3'-(2,4,6-trimethylphenyl)-4'*H*-spiro[bicyclo[2.2.1]heptane-3,5'-isoxazol]-2-one

De = 100%

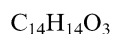
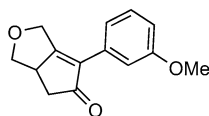
$[\alpha]_D^{21} = -401.1$ (*c* 0.09, $CHCl_3$)

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

Absolute configuration: (1*R*,3*R*,4*S*,4'*R*)

Fuk Yee Kwong,* Hang Wai Lee, Wai Har Lam,
Liqin Qiu and Albert S. C. Chan*

Tetrahedron: Asymmetry 17 (2006) 1238

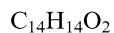
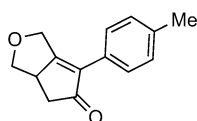


2-(3-Methoxyphenyl)-7-oxabicyclo[3.3.0]oct-1-en-3one

$[\alpha]_D^{25} = +26.3$ (*c* 0.11, CH_2Cl_2)

Fuk Yee Kwong,* Hang Wai Lee, Wai Har Lam,
Liqin Qiu and Albert S. C. Chan*

Tetrahedron: Asymmetry 17 (2006) 1238

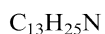
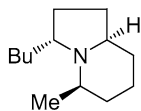


2-(4-Methylphenyl)-7-oxabicyclo[3.3.0]oct-1-en-3one

$[\alpha]_D^{25} = +60.9$ (*c* 0.10, CH_2Cl_2)

Elisabeth Conchon, Yvonne Gelas-Mialhe and Roland Remuson*

Tetrahedron: Asymmetry 17 (2006) 1253



(3*R*,5*R*,8*aR*)-3-Butyl-5-methylindolizidine

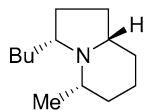
$[\alpha]_D^{25} = -90.2$ (*c* 0.75, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,5*R*,8*aR*

Elisabeth Conchon, Yvonne Gelas-Mialhe and Roland Remuson*

Tetrahedron: Asymmetry 17 (2006) 1253



C₁₃H₂₅N

(3*R*,5*S*,8*aS*)-3-Butyl-5-methylindolizidine

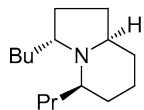
$[\alpha]_D^{25} = +17.6$ (*c* 0.21, hexane)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,5*S*,8*aS*

Elisabeth Conchon, Yvonne Gelas-Mialhe and Roland Remuson*

Tetrahedron: Asymmetry 17 (2006) 1253



C₁₅H₂₉N

(3*R*,5*R*,8*aR*)-3-Butyl-5-propylindolizidine

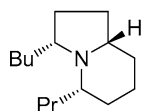
$[\alpha]_D^{25} = -98$ (*c* 2.1, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,5*R*,8*aR*

Elisabeth Conchon, Yvonne Gelas-Mialhe and Roland Remuson*

Tetrahedron: Asymmetry 17 (2006) 1253



C₁₅H₂₉N

(3*R*,5*S*,8*aS*)-3-Butyl-5-propylindolizidine

E_e = 82%

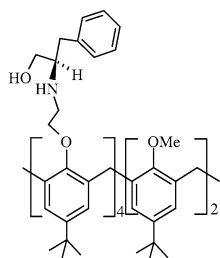
$[\alpha]_D^{25} = -87.5$ (*c* 0.83, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*,5*S*,8*aS*

Serkan Erdemir, Mustafa Tabakci and Mustafa Yilmaz*

Tetrahedron: Asymmetry 17 (2006) 1258



C₁₁₂H₁₄₈N₄O₁₀

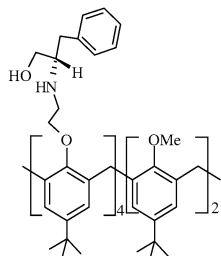
5,11,17,23,29,35-*tert*-Butyl-37,38-dimethoxy-39,40,41,42-(*D*-1-hydroxy-3-phenyl-2-propylaminoethoxy)-calix[6]arene

$[\alpha]_D^{22} = -3.9$ (*c* 3.3, CHCl₃)

Source of chirality: *D*-phenylalaninol

Serkan Erdemir, Mustafa Tabakci and Mustafa Yilmaz*

Tetrahedron: Asymmetry 17 (2006) 1258



$C_{112}H_{148}N_4O_{10}$

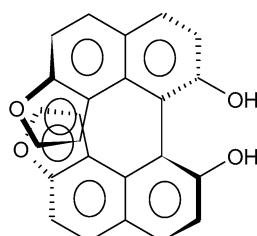
5,11,17,23,29,35-*tert*-Butyl-37,38-dimethoxy-39,40,41,42-(L-1-hydroxy-3-phenyl-2-propylaminoethoxy)-calix[6]arene

$[\alpha]_D^{22} = +4.2$ (*c* 3.3, $CHCl_3$)

Source of chirality: L-phenylalaninol

Anil V. Karnik,* Sunil P. Upadhyay and Manish G. Gangrade

Tetrahedron: Asymmetry 17 (2006) 1275



$C_{24}H_{14}O_4$

(*S*)-(+)-[9,9']Bi[naphtho(2,1-*b*)furanyl]-8,8'-diol

Ee = 99.1%

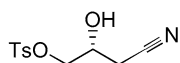
$[\alpha]_{589}^{25} = +110$ (*c* 1, THF)

Source of chirality: resolution

Absolute configuration: *S*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



$C_{11}H_{13}NO_4S$

(*R*)-3-Hydroxy-4-tosyloxybutanenitrile

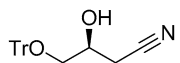
$[\alpha]_D^{26} = +13.5$ (*c* 1.45, EtOH)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



$C_{23}H_{21}NO_2$

(*S*)-3-Hydroxy-4-triphenylmethoxybutanenitrile

Ee = >99%

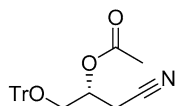
$[\alpha]_D^{29} = -7.6$ (*c* 1.5, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



C₂₅H₂₃O₃N

(*R*)-3-Acetyloxy-4-triphenylmethoxybutanenitrile

Ee = >99%

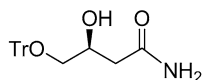
[α]_D²⁹ = +24.4 (c 1.35, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



C₂₃H₂₃O₃N

(*S*)-3-Hydroxy-4-triphenylmethoxy butanamide

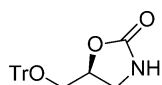
[α]_D²⁷ = -18.1 (c 1.0, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



C₂₃H₂₁O₃

(*S*)-5-Trityloxymethyl-2-oxazolidinone

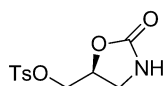
[α]_D²⁶ = +25.0 (c 1.0, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



C₁₁H₁₃NO₅S

(*S*)-5-Tosyloxymethyl-1,3-oxazolidinone-2-one

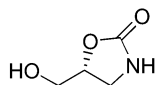
[α]_D²⁷ = +45.4 (c 1.25, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



(*R*)-5-Hydroxymethyl-1,3-oxazolidine-2-one

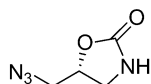
$$[\alpha]_D^{27} = -33.3 \text{ (} c \text{ 0.45, EtOH)}$$

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



(*R*)-5-Azidomethyl-1,3-oxazolidine-2-one

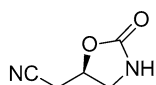
$$[\alpha]_D^{29} = -62.2 \text{ (} c \text{ 1.12, CHCl}_3)$$

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



(*R*)-5-Cyanomethyl-1,3-oxazolidine-2-one

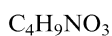
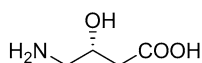
$$[\alpha]_D^{26} = +4.5 \text{ (} c \text{ 1.0, MeOH)}$$

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Ahmed Kamal,* G. B. Ramesh Khanna, T. Krishnaji and R. Ramu

Tetrahedron: Asymmetry 17 (2006) 1281



(*R*)-GABOB

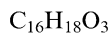
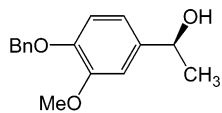
$$[\alpha]_D^{28} = -20.7 \text{ (} c \text{ 1.0, H}_2\text{O)}$$

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



(*S*)-1-(4-(Benzyloxy)-3-methoxyphenyl)ethanol

Ee = 99%

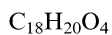
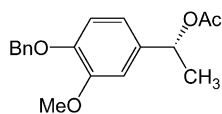
$[\alpha]_D^{20} = -27.9$ (*c* 1.00, $CHCl_3$)

Source of chirality: resolution by lipase

Absolute configuration: *S*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



(*R*)-1-Acetoxy-1-(4-(benzyloxy)-3-methoxyphenyl)ethane

Ee = 92%

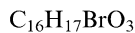
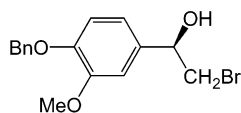
$[\alpha]_D^{20} = +78.6$ (*c* 1.00, $CHCl_3$)

Source of chirality: resolution by lipase

Absolute configuration: *R*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



(*R*)-2-Bromo-1-(4-(benzyloxy)-3-methoxyphenyl)ethanol

Ee = 94%

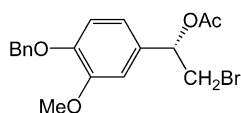
$[\alpha]_D^{20} = +5.8$ (*c* 1.00, $CHCl_3$)

Source of chirality: resolution by lipase

Absolute configuration: *R*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



(*S*)-1-Acetoxy-2-bromo-1-(4-(benzyloxy)-3-methoxyphenyl)ethane

Ee = 98%

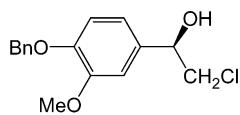
$[\alpha]_D^{20} = +43.1$ (*c* 1.00, $CHCl_3$)

Source of chirality: resolution by lipase

Absolute configuration: *S*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



$C_{16}H_{17}ClO_3$

(*R*)-2-Chloro-1-(4-(benzyloxy)-3-methoxyphenyl)ethanol

Ee = 97%

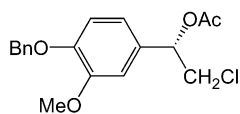
$[\alpha]_D^{20} = -12.1$ (*c* 1.00, MeOH)

Source of chirality: resolution by lipase

Absolute configuration: *R*

Erik Fuglseth, Thorleif Anthonsen and Bård Helge Hoff*

Tetrahedron: Asymmetry 17 (2006) 1290



$C_{18}H_{19}ClO_4$

(*S*)-1-Acetoxy-2-chloro-1-(4-(benzyloxy)-3-methoxyphenyl)ethane

Ee = 95%

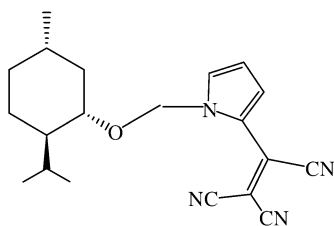
$[\alpha]_D^{20} = +39.4$ (*c* 1.00, $CHCl_3$)

Source of chirality: resolution by lipase

Absolute configuration: *S*

Fabrizio Cattaruzza, Vincenzo Fares,* Alberto Flamini* and Tommaso Proserpi

Tetrahedron: Asymmetry 17 (2006) 1296



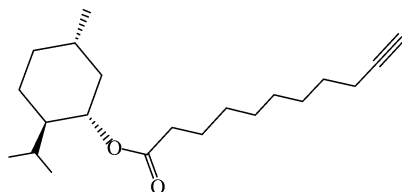
$C_{20}H_{24}N_4O$

(+)-(1*S*,2*R*,5*S*)-1-(2-tricyanovinyl-1*H*-pyrrol-1-yl-methoxy)-2-isopropyl-5-methylcyclohexane

$[\alpha]_D^{20} = +4.2$ (*c* 1.5, $CHCl_3$)

Fabrizio Cattaruzza, Vincenzo Fares,* Alberto Flamini* and Tommaso Proserpi

Tetrahedron: Asymmetry 17 (2006) 1296



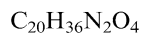
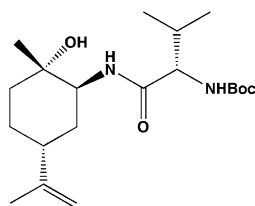
$C_{21}H_{36}O_2$

(+)-(1*S*,2*R*,5*S*)-1-(10-undecynoate)-2-isopropyl-5-methylcyclohexane

$[\alpha]_D^{20} = +4.7$ (*c* 1.5, $CHCl_3$)

Cian Christopher Watts, Praveen Thoniyot, Frank Cappuccio,
Joelle Verhagen, Brain Gallagher and Bakthan Singaram*

Tetrahedron: Asymmetry 17 (2006) 1301



{(S)-1-[(1S,2S,5R)-2-Hydroxy-2-methyl-5-(1-methylethenyl)cyclohexylcarbamoyl]-2-methylpropyl}-carbamic acid *tert*-butyl ester

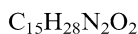
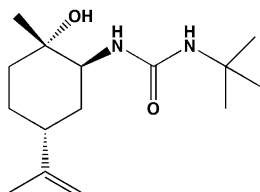
$[\alpha]_D^{25} = +18.1$ (*c* 2.0, methanol)

Source of chirality: asymmetric synthesis

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

Cian Christopher Watts, Praveen Thoniyot, Frank Cappuccio,
Joelle Verhagen, Brain Gallagher and Bakthan Singaram*

Tetrahedron: Asymmetry 17 (2006) 1301



1-*tert*-Butyl-3-[(1S,2S,5R)-2-hydroxy-2-methyl-5-(1-methylethenyl)cyclohexyl]urea

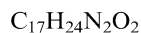
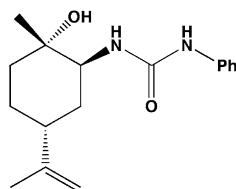
$[\alpha]_D^{25} = +22.4$ (*c* 2.0, methanol)

Source of chirality: asymmetric synthesis

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

Cian Christopher Watts, Praveen Thoniyot, Frank Cappuccio,
Joelle Verhagen, Brain Gallagher and Bakthan Singaram*

Tetrahedron: Asymmetry 17 (2006) 1301



1-[(1S,2S,5R)-2-Hydroxy-2-methyl-5-(1-methylethenyl)cyclohexyl]-3-phenylurea

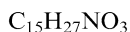
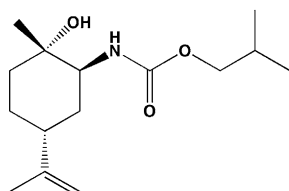
$[\alpha]_D^{25} = +9.7$ (*c* 2.0, methanol)

Source of chirality: asymmetric synthesis

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

Cian Christopher Watts, Praveen Thoniyot, Frank Cappuccio,
Joelle Verhagen, Brain Gallagher and Bakthan Singaram*

Tetrahedron: Asymmetry 17 (2006) 1301



[(1S,2S,5R)-2-Hydroxy-2-methyl-5-(1-methylethenyl)cyclohexyl]carbamic acid isobutyl ester

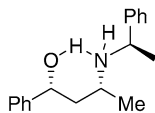
$[\alpha]_D^{25} = +13.5$ (*c* 1.0, methanol)

Source of chirality: asymmetric synthesis

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{18}H_{23}NO$

(*R,R*)-1-Phenyl-3-[[[(1*R*)-1-phenylethyl]amino]butan-1-ol

Ee = 98%

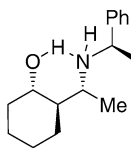
$[\alpha]_D^{20} = +3.3$ (*c* 4.7, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{16}H_{25}NO$

(1*S*,2*R*)-2-((1*R*)-1-[[[(1*R*)-1-Phenylethyl]amino]ethyl]cyclohexanol

Ee = 98%

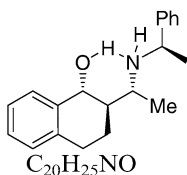
$[\alpha]_D^{20} = -36.4$ (*c* 0.3, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{20}H_{25}NO$

(1*R*,2*R*)-2-((1*R*)-1-[[[(1*R*)-1-Phenylethyl]amino]ethyl)-1,2,3,4-tetrahydronaphthalen-1-ol

Ee = 98%

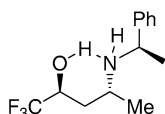
$[\alpha]_D^{20} = -159.8$ (*c* 0.8, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{13}H_{18}F_3NO$

(2*S*,4*R*)-1,1,1-Trifluoro-4-[[[(1*R*)-1-phenylethyl]amino]pentan-2-ol

Ee = 98%

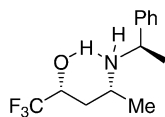
$[\alpha]_D^{20} = -83.5$ (*c* 0.6, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{13}H_{18}F_3NO$

(2*R*,4*R*)-1,1,1-Trifluoro-4-[[[(1*R*)-1-phenylethyl]amino]pentan-2-ol

Ee = 98%

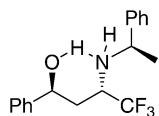
$[\alpha]_D^{20} = -32.5$ (c 0.1, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{18}H_{20}F_3NO$

(1*S*,3*S*)-4,4,4-Trifluoro-1-phenyl-3-[[[(1*R*)-1-phenylethyl]amino]butan-1-ol

Ee = 98%

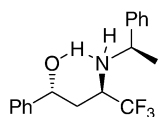
$[\alpha]_D^{20} = +148.6$ (c 0.8, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{18}H_{20}F_3NO$

(1*R*,3*R*)-4,4,4-Trifluoro-1-phenyl-[[[(1*R*)-1-phenylethyl]amino]butan-1-ol

Ee = 98%

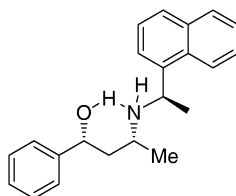
$[\alpha]_D^{20} = -20.4$ (c 0.6, $CHCl_3$)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



$C_{22}H_{25}NO$

(1*R*,3*R*)-3-[[[(1*R*)-1-(1-Naphthyl)ethyl]amino]-1-phenylbutan-1-ol

Ee = 98%

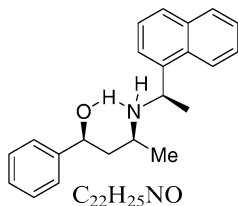
$[\alpha]_D^{20} = -2.5$ (c 0.6, $CHCl_3$)

Source of chirality: (*R*)-1-naphthylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



(1*S*,3*S*)-3-[[[(1*R*)-1-(1-Naphthyl)ethyl]amino]-1-phenylbutan-1-ol

Ee = 98%

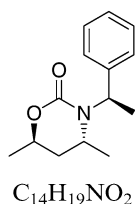
$[\alpha]_D^{20} = -3.4$ (*c* 0.6, CHCl₃)

Source of chirality: (*R*)-1-naphthylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



(4*R*,6*R*)-4,6-Dimethyl-3-[(1*R*)-1-phenylethyl]-1,3-oxazinan-2-one

Ee = 98%

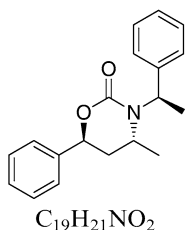
$[\alpha]_D^{20} = +35.5$ (*c* 3.4, CHCl₃)

Source of chirality: (*R*)-1-phenylethylamine

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

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



(4*R*,6*S*)-4-Methyl-6-phenyl-3-[(1*R*)-1-phenylethyl]-1,3-oxazinan-2-one

Ee = 98%

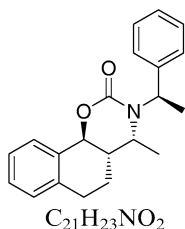
$[\alpha]_D^{20} = +18.3$ (*c* 1.6, CHCl₃)

Source of chirality: (*R*)-1-phenylethylamine

Absolute configuration: (4*R*,6*S*,1'*R*)

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



(4*R*,4*aS*,10*bS*)-4-Methyl-3-[(1*R*)-1-phenylethyl]-3,4,4*a*,5,6,10*b*-hexahydro-2*H*-naphtho[2,1-*e*][1,3]oxazin-2-one

Ee = 98%

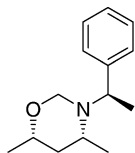
$[\alpha]_D^{20} = +126.7$ (*c* 0.8, CHCl₃)

Source of chirality: (*R*)-1-phenylethylamine

Absolute configuration: (4*R*,4*aS*,10*bS*,1'*R*)

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



C₁₄H₂₁NO

(4*R*,6*S*)-4,6-Dimethyl-3-[(1*R*)-1-phenylethyl]-1,3-oxazinane

Ee = 98%

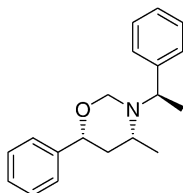
[α]_D²⁰ = -48.1 (c 3.1, CHCl₃)

Source of chirality: (*R*)-1-phenylethylamine

Absolute configuration: (4*R*,6*S*,1'*R*)

Cristina Cimarelli, Sandra Giuli and Gianni Palmieri*

Tetrahedron: Asymmetry 17 (2006) 1308



C₁₉H₂₃NO

(*R*,*R*)-4-Methyl-6-phenyl-3-[(1*R*)-1-phenylethyl]-1,3-oxazinane

Ee = 98%

[α]_D²⁰ = -32.8 (c 2.0, CHCl₃)

Source of chirality: (*R*)-1-phenylethylamine

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