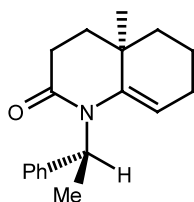


I. Jabin,* G. Revial, M. Pfau and P. Netchitaïlo

Tetrahedron: Asymmetry 13 (2002) 563C₁₈H₂₃NO

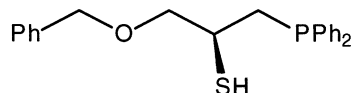
(4aR)-(+)-4a-Methyl-1-[(1S)-1-phenyl-ethyl]-3,4,4a,5,6,7-hexahydro-1H-quinolin-2-one

E.e. = 100%

 $[\alpha]_D^{20} = +73$ (c 1.57, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 4aR,1-1S

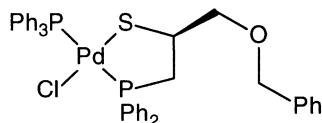
Nuria Brugat, Josep Duran, Alfonso Polo,* Julio Real,*
Ángel Álvarez-Larena and J. Francesc Piniella*Tetrahedron: Asymmetry 13 (2002) 569*C₂₂H₂₃OPS

(2S)-1-(1-Diphenylphosphino-3-benzyloxy)propane-2-thiol

E.e. = 92%

 $[\alpha]_D^{24} = +12.5$ (c 0.12, CH₂Cl₂)

Source of chirality: benzyl (S)-(+)-glycidyl ether

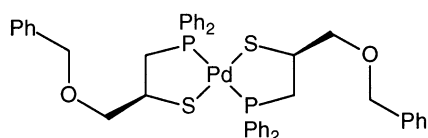
Nuria Brugat, Josep Duran, Alfonso Polo,* Julio Real,*
Ángel Álvarez-Larena and J. Francesc Piniella*Tetrahedron: Asymmetry 13 (2002) 569*C₄₀H₃₇ClOP₂PdS

Chloro{((2S)-1-(1-diphenylphosphino-3-benzyloxy)propane-2-thiolato)triphenylphosphine}palladium(II)

E.e. = 92%

 $[\alpha]_D^{24} = +19.5$ (c 0.09, CH₂Cl₂)

Source of chirality: benzyl (S)-(+)-glycidyl ether

Nuria Brugat, Josep Duran, Alfonso Polo,* Julio Real,*
Ángel Álvarez-Larena and J. Francesc Piniella*Tetrahedron: Asymmetry 13 (2002) 569*C₄₄H₄₄O₂P₂PdS₂

Bis{((2S)-1-(1-diphenylphosphino-3-benzyloxy)propane-2-thiolato)}palladium(II)

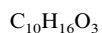
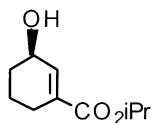
E.e. = 92%

 $[\alpha]_D^{24} = +14.0$ (c 0.10, CH₂Cl₂)

Source of chirality: benzyl (S)-(+)-glycidyl ether

Laure Fonteneau, Sandra Rosa and Didier Buisson*

Tetrahedron: Asymmetry 13 (2002) 579



Isopropyl (3*R*)-3-hydroxycyclohex-1-ene-1-carboxylate

E.e. = 96% (by GC of *O*-acetylacetate derivative)

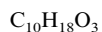
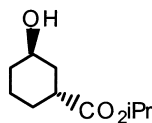
$[\alpha]_D^{20} = +37$ (*c* 1, MeOH)

Source of chirality: microbial transformation

Absolute configuration: 3*R*

Laure Fonteneau, Sandra Rosa and Didier Buisson*

Tetrahedron: Asymmetry 13 (2002) 579



Isopropyl (1*R*,3*R*)-3-hydroxycyclohexane-1-carboxylate

E.e. = 96% (by GC *O*-acetylactate derivative)

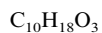
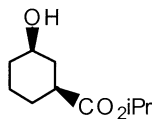
$[\alpha]_D^{20} = -10$ (*c* 1, MeOH)

Source of chirality: microbial reduction

Absolute configuration: 1*R*,3*R*

Laure Fonteneau, Sandra Rosa and Didier Buisson*

Tetrahedron: Asymmetry 13 (2002) 579



Isopropyl (1*S*,3*R*)-3-hydroxycyclohexane-1-carboxylate

E.e. = 96% (by HPLC on chiral column)

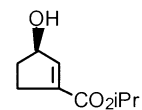
$[\alpha]_D^{20} = +4$ (*c* 1, MeOH)

Source of chirality: microbial transformation

Absolute configuration: 1*S*,3*R*

Laure Fonteneau, Sandra Rosa and Didier Buisson*

Tetrahedron: Asymmetry 13 (2002) 579



Isopropyl (3*R*)-3-hydroxycyclopent-1-ene-1-carboxylate

E.e. = 99% (by 2H NMR in chiral solvent)

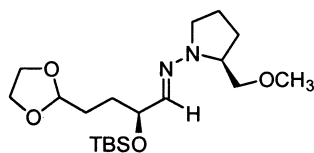
$[\alpha]_D^{20} = +62$ (*c* 0.7, MeOH)

Source of chirality: microbial transformation

Absolute configuration: 3*R*

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



C₁₉H₃₈O₄N₂Si

(2*S*,2*S*)-(-)-(E)-*N*-[2-(*tert*-Butyldimethylsilyloxy)-4-([1,3]dioxolan-2-yl)-but-1-ylidene]-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

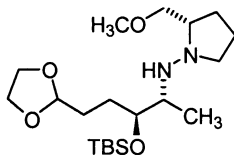
$[\alpha]_D^{26} = -50.1$ (*c* 1.04, CHCl₃)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



C₂₀H₄₂N₂O₄Si

(1*R*,2*S*,2*S*)-(-)-*N*-[2-(*tert*-Butyldimethylsilyloxy)-4-([1,3]dioxolan-2-yl)-1-methylbutyl]-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

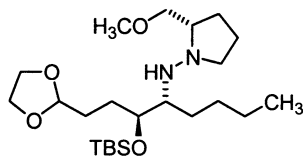
$[\alpha]_D^{27} = -52.7$ (*c* 1.01, CHCl₃)

Source of chirality: asymmetric synthesis

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

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Tetrahedron: Asymmetry 13 (2002) 587



C₂₃H₄₈N₂O₄Si

(1*R*,2*S*,2*S*)-(-)-*N*-[1-[2-(*tert*-Butyldimethylsilyloxy)-3-[1,3]dioxolan-2-yl-propyl]-pentyl]-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

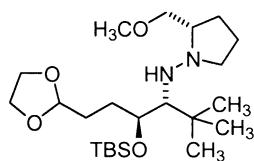
$[\alpha]_D^{28} = -75.9$ (*c* 1.48, CHCl₃)

Source of chirality: asymmetric synthesis

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

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Tetrahedron: Asymmetry 13 (2002) 587



C₂₃H₄₈N₂O₄Si

(1*R*,2*S*,2*S*)-(-)-*N*-[1-*tert*-Butyl-2-(*tert*-Butyldimethylsilyloxy)-4-[1,3]dioxolan-2-yl-butyl]-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

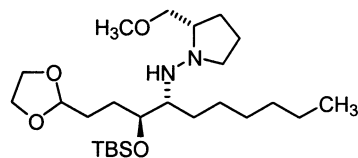
$[\alpha]_D^{30} = -91.4$ (*c* 1.15, CHCl₃)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



$C_{25}H_{52}N_2O_4Si$

(1*R*,2*S*,2*S*)-(-)-*N*-{1-[1-(*tert*-Butyldimethylsilyloxy)-3-[1,3]dioxolan-2-yl-propyl]-heptyl}-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

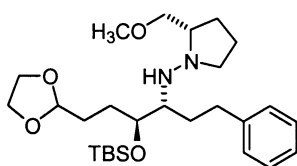
$[\alpha]_D^{25} = -99.8$ (*c* 1.03, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



$C_{27}H_{48}N_2O_4Si$

(1*R*,2*S*,2*S*)-(-)-*N*-{1-[2-(*tert*-Butyldimethylsilyloxy)-4-[1,3]dioxolan-2-yl-1-phenylethylbutyl]}-*N*-(2-methoxymethylpyrrolidin-1-yl)-amine

E.e. >96% (based on parent hydrazone)

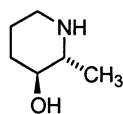
$[\alpha]_D^{24} = -79.95$ (*c* 1.10, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



$C_6H_{13}NO$

(2*R*,3*S*)-(+)-2-Methyl-piperidin-3-ol

E.e. >96% (based on parent hydrazone)

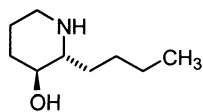
$[\alpha]_D^{25} = +16.2$ (*c* 0.92, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



$C_9H_{19}NO$

(2*R*,3*S*)-(+)-2-*n*-Butyl-piperidin-3-ol

E.e. >96% (based on parent hydrazone)

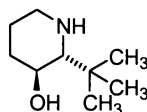
$[\alpha]_D^{25} = +28.6$ (*c* 1.90, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



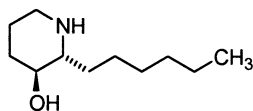
C₉H₁₉NO

(2*R*,3*S*)-(+)-2-*t*-Butyl-piperidin-3-ol

E.e. >96% (based on parent hydrazine)
 $[\alpha]_D^{25} = +35.7$ (*c* 1.04, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



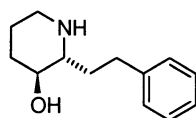
C₁₁H₂₃NO

(2*R*,3*S*)-(+)-2-*n*-Hexyl-piperidin-3-ol

E.e. >96% (based on parent hydrazine)
 $[\alpha]_D^{25} = +32.7$ (*c* 1.06, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

Dieter Enders,* Bert Nolte and Jan Runsink

Tetrahedron: Asymmetry 13 (2002) 587



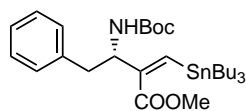
C₁₃H₁₉NO

(2*R*,3*S*)-(+)-2-(2-Phenylethyl)-piperidin-3-ol

E.e. >96% (based on parent hydrazine)
 $[\alpha]_D^{25} = +26.8$ (*c* 1.00, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



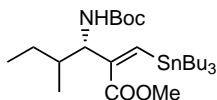
C₂₉H₄₉NO₄Sn

Methyl 2-((1*S*)-1-[(*tert*-butoxy)carbonylamino]-2-phenylethyl)-(2*Z*)-3-tributylstannyl-prop-2-enoate

$[\alpha]_D^{20} = -1.6$ (*c* = 1.65, CHCl₃)
Source of chirality: L-phenylalanine
Absolute configuration: *S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and
Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



$C_{26}H_{51}NO_4Sn$

Methyl 2-((1S)-1-((tert-butoxy)carbonylamino)-2-methylbutyl)-(2Z)-3-tributylstannyl-prop-2-enoate

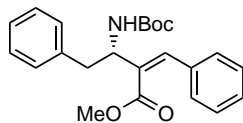
$[\alpha]_D^{22} = -32.1$ ($c = 1.00$, $CHCl_3$)

Source of chirality: L-isoleucine

Absolute configuration: *S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and
Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



$C_{23}H_{27}NO_4$

Methyl 2-((1S)-1-((tert-butoxy)carbonylamino)-2-phenylethyl)-(2Z)-3-phenyl-prop-2-enoate

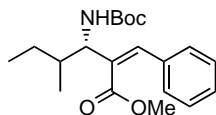
$[\alpha]_D^{20} = +19.4$ ($c = 0.99$, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: *S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and
Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



$C_{20}H_{29}NO_4$

Methyl 2-((1S)-1-((tert-butoxy)carbonylamino)-2-methylbutyl)-(2Z)-3-phenyl-prop-2-enoate

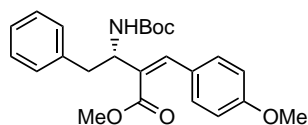
$[\alpha]_D^{22} = -45.3$ ($c = 1.00$, $CHCl_3$)

Source of chirality: L-isoleucine

Absolute configuration: *S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and
Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



$C_{24}H_{29}NO_5$

Methyl 2-((1S)-1-((tert-butoxy)carbonylamino)-2-phenylethyl)-(2Z)-3-(4-methoxy)phenyl-prop-2-enoate

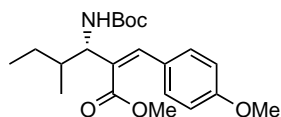
$[\alpha]_D^{22} = +17.2$ ($c = 1.04$, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: *S*

Gianna Reginato,* Alessandro Mordini, Michela Valacchi and Riccardo Piccardi

Tetrahedron: Asymmetry 13 (2002) 595



$C_{21}H_{31}NO_5$

Methyl 2-((1S)-1-((tert-butoxy)carbonylamino)-2-methylbutyl)-(2Z)-3-(4-methoxy)phenylprop-2-enoate

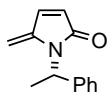
$[\alpha]_D^{22} = -58.2$ ($c = 1.36$, $CHCl_3$)

Source of chirality: L-isoleucine

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_{13}H_{13}NO$

(*S*)-5-Methylene-1-(1-phenylethyl)-1,5-dihydro-2H-pyrrol-2-one

E.e. >99%

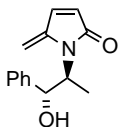
$[\alpha]_D^{20} = -42.9$ ($c = 3.2$, $CHCl_3$)

Source of chirality: (*S*)-phenylethylamine

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_{14}H_{15}NO_2$

1-[(1*S*,2*R*)-2-Hydroxy-1-methyl-2-phenylethyl]-5-methylene-1,5-dihydro-2H-pyrrol-2-one

E.e. >99%

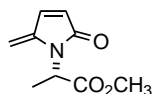
$[\alpha]_D^{20} = +14.5$ ($c = 5.5$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-norephedrine

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

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_9H_{11}NO_3$

(*S*)-Methyl 2-(2-methylene-5-oxo-2,5-dihydro-1H-pyrrol-1-yl)propanoate

E.e. >99%

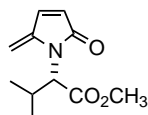
$[\alpha]_D^{20} = -66.5$ ($c = 0.2$, $CHCl_3$)

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

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_{11}H_{15}NO_3$

(*S*)-Methyl 3-methyl-2-(2-methylene-5-oxo-2,5-dihydro-1*H*-pyrrol-1-yl)butanoate

E.e. >99%

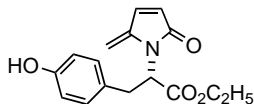
$[\alpha]_D^{20} = -20.4$ (*c* 4.3, $CHCl_3$)

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

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_{16}H_{17}NO_4$

(*S*)-Ethyl 3-(4-hydroxyphenyl)-2-(2-methylene-5-oxo-2,5-dihydro-1*H*-pyrrol-1-yl)propanoate

E.e. >99%

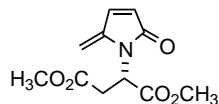
$[\alpha]_D^{20} = -15.6$ (*c* 3.0, $CHCl_3$)

Source of chirality: (*S*)-tyrosine ethyl ester

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_{11}H_{13}NO_5$

(*S*)-Dimethyl 2-(2-methylene-5-oxo-2,5-dihydro-1*H*-pyrrol-1-yl)succinate

E.e. >99%

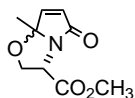
$[\alpha]_D^{20} = -53.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-glutamic acid diethyl ester

Absolute configuration: *S*

Ayhan S. Demir,* Feray Aydogan and Idris M. Akhmedov

Tetrahedron: Asymmetry 13 (2002) 601



$C_9H_{11}NO_4$

(*S,RS*)-Methyl 7a-methyl-5-oxo-2,3,5,7a-tetrahydropyrrolo[2,1-*b*][1,3]-oxazole-3-carboxylate

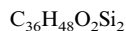
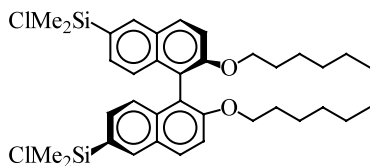
$[\alpha]_D^{20} = -77.5$ (*c* 0.2, $CHCl_3$)

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

Absolute configuration: *S,RS*

Peter Hesemann, Joël J. E. Moreau* and Cheng Yixiang

Tetrahedron: Asymmetry 13 (2002) 607



(*R*)-6,6'-Bis(chlorodimethylsilyl)-2,2'-di(hexyloxy)-1,1'-binaphthyl

E.e. >99%

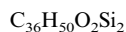
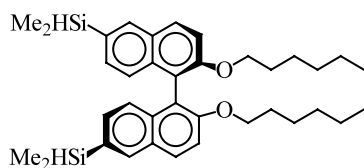
$[\alpha]_D^{25} = +37.8$ ($c = 1.08$, CH_2Cl_2)

Source of chirality: (*R*)-2,2'-dihydroxy-1,1'-binaphthyl

Absolute configuration: *R*

Peter Hesemann, Joël J. E. Moreau* and Cheng Yixiang

Tetrahedron: Asymmetry 13 (2002) 607



(*R*)-6,6'-Bis(chlorodimethylsilyl)-2,2'-di(hexyloxy)-1,1'-binaphthyl

E.e. >99%

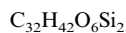
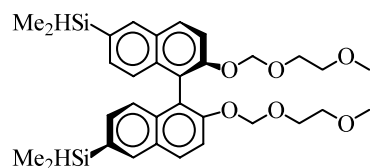
$[\alpha]_D^{25} = -2.1$ ($c = 1.35$, THF)

Source of chirality: (*R*)-2,2'-dihydroxy-1,1'-binaphthyl

Absolute configuration: *R*

Peter Hesemann, Joël J. E. Moreau* and Cheng Yixiang

Tetrahedron: Asymmetry 13 (2002) 607



(*R*)-6,6'-Bis(dimethylsilyl)-2,2'-di(methoxyethoxymethoxy)-1,1'-binaphthyl

E.e. >99%

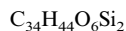
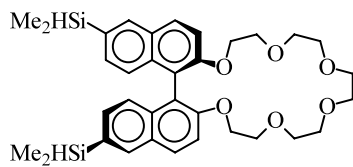
$[\alpha]_D^{25} = +1.9$ (THF, $c = 0.572$)

Source of chirality: (*R*)-2,2'-dihydroxy-1,1'-binaphthyl

Absolute configuration: *R*

Peter Hesemann, Joël J. E. Moreau* and Cheng Yixiang

Tetrahedron: Asymmetry 13 (2002) 607



(*R*)-6,6'-Bis(dimethylsilyl)-2,2'-binaphtho-20-crown-6

E.e. >99%

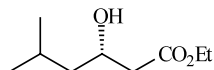
$[\alpha]_D^{25} = -5.2$ (THF, $c = 0.461$)

Source of chirality: (*R*)-2,2'-dihydroxy-1,1'-binaphthyl

Absolute configuration: *R*

Patricia T. Baraldi, Paulo H. G. Zarbin, Paulo C. Vieira
and Arlene G. Corrêa*

Tetrahedron: Asymmetry 13 (2002) 621



C₉H₁₈O₃

Ethyl (*S*)-3-hydroxy-5-methylhexanoate

E.e. = 99%

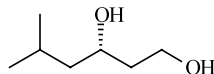
$[\alpha]_D^{25} = -9.95$ (c 12.72, CHCl₃)

Source of chirality: microbiological reduction

Absolute configuration: (*3S*)

Patricia T. Baraldi, Paulo H. G. Zarbin, Paulo C. Vieira
and Arlene G. Corrêa*

Tetrahedron: Asymmetry 13 (2002) 621



C₇H₁₆O₂

(*S*)-5-Methylhexane-1,3-diol

E.e. = 99%

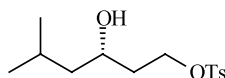
$[\alpha]_D^{25} = -16.3$ (c 1.9, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*3S*)

Patricia T. Baraldi, Paulo H. G. Zarbin, Paulo C. Vieira
and Arlene G. Corrêa*

Tetrahedron: Asymmetry 13 (2002) 621



C₁₄H₂₂O₄S

(*S*)-3-Hydroxy-5-methylhexyl-*p*-toluenesulfonate

E.e. = 99%

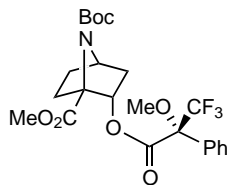
$[\alpha]_D^{25} = -5.2$ (c 0.4, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*3S*)

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



C₂₃H₂₈F₃NO₇

Methyl (1*S*,2*S*,4*R*,2'*R*)-*N*-(*tert*-butoxycarbonyl)-2-[2'-methoxy-2'-(trifluoromethyl)phenylacetyloxy]-7-azabicyclo[2.2.1]heptane-1-carboxylate

E.e. >95%

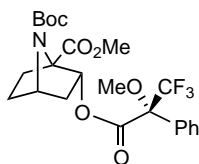
$[\alpha]_D^{25} = +45.3$ (c 1.09, MeOH)

Source of chirality: resolution

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



$C_{23}H_{28}F_3NO_7$

Methyl (1*R*,2*R*,4*S*,2'*R*)-*N*-(*tert*-butoxycarbonyl)-2-[2'-methoxy-2'-(trifluoromethyl)phenylacetyloxy]-7-azabicyclo[2.2.1]heptane-1-carboxylate

E.e. >95%

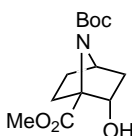
$[\alpha]_D^{25} = -7.4$ (c 1.07, MeOH)

Source of chirality: resolution

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



$C_{13}H_{21}NO_5$

Methyl (1*S*,2*S*,4*R*)-*N*-(*tert*-butoxycarbonyl)-2-hydroxy-7-azabicyclo[2.2.1]heptane-1-carboxylate

E.e. >95%

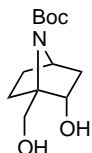
$[\alpha]_D^{25} = +10.6$ (c 1.00, MeOH)

Source of chirality: resolution

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



$C_{12}H_{21}NO_4$

(1*R*,2*S*,4*R*)-*N*-(*tert*-Butoxycarbonyl)-2-hydroxy-1-hydroxymethyl-7-azabicyclo[2.2.1]heptane

E.e. >95%

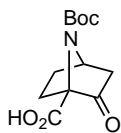
$[\alpha]_D^{25} = +14.7$ (c 1.00, MeOH)

Source of chirality: resolution

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

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Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



$C_{12}H_{17}NO_5$

(1*S*,4*R*)-*N*-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one-1-carboxylic acid

E.e. >95%

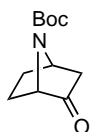
$[\alpha]_D^{25} = +1.8$ (c 0.97, CHCl₃)

Source of chirality: resolution

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

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Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



C₁₁H₁₇NO₃

(1*S*,4*R*)-*N*-(*tert*-Butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one

E.e. >95%

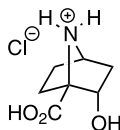
$[\alpha]_D^{25} = +71.5$ (c 1.03, CHCl₃)

Source of chirality: resolution

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



C₇H₁₂ClNO₃

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

E.e. >95%

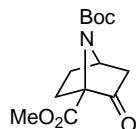
$[\alpha]_D^{25} = +31.0$ (c 1.00, H₂O)

Source of chirality: resolution

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

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Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



C₁₃H₁₉NO₅

Methyl (1*S*,4*R*)-*N*-(*tert*-butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one-1-carboxylate

E.e. >95%

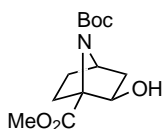
$[\alpha]_D^{25} = -7.2$ (c 1.11, MeOH)

Source of chirality: resolution

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



C₁₃H₂₁NO₅

Methyl (1*S*,2*R*,4*R*)-*N*-(*tert*-butoxycarbonyl)-2-hydroxy-7-azabicyclo[2.2.1]heptane-1-carboxylate

E.e. >95%

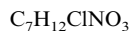
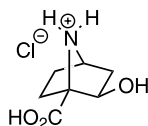
$[\alpha]_D^{25} = -3.4$ (c 0.87, MeOH)

Source of chirality: resolution and stereoselective reaction

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

Alberto Avenoza,* José I. Barriobero, Jesús H. Busto,
Carlos Cativiela and Jesús M. Peregrina*

Tetrahedron: Asymmetry 13 (2002) 625



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

E.e. >95%

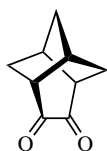
$[\alpha]_D^{25} = -7.1$ (*c* 1.06, H₂O)

Source of chirality: resolution and stereoselective reaction

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

Eugenius Butkus,* Albinas Žilinskas, Sigita Stončius,
Ričardas Rozenbergas, Marie Urbanová, Vladimír Setnička,
Petr Bouř and Karel Volka

Tetrahedron: Asymmetry 13 (2002) 633



(1*R*,3*R*,6*R*,8*R*)-Tricyclo[4.3.0.0^{3,8}]nonane-4,5-dione

E.e. = 95%

$[\alpha]_{546}^{16} = +207.5$ (*c* 0.07, CHCl₃)

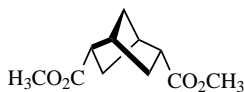
CD: λ_{max} ($\Delta\epsilon/dm^3 mol^{-1} cm^{-1}$) <235 (positive),
279 (-1.26), 419 (+0.78)

Source of chirality: enantiospecific synthesis

Absolute configuration: 1*R*,3*R*,6*R*,8*R* (assigned by
CD spectroscopy and chemical correlation)

Eugenius Butkus,* Albinas Žilinskas, Sigita Stončius,
Ričardas Rozenbergas, Marie Urbanová, Vladimír Setnička,
Petr Bouř and Karel Volka

Tetrahedron: Asymmetry 13 (2002) 633



(+)-(1*R*,2*R*,4*R*,5*R*)-endo,endo-Dimethyl-bicyclo[2.2.1]heptane-2,5-dicarboxylate

E.e. = 95%

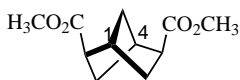
$[\alpha]_{546}^{21} = +32.5$ (*c* 0.08, CHCl₃)

Source of chirality: enantiospecific synthesis

Absolute configuration: 1*R*,2*R*,4*R*,5*R* (assigned by
chemical correlation)

Eugenius Butkus,* Albinas Žilinskas, Sigita Stončius,
Ričardas Rozenbergas, Marie Urbanová, Vladimír Setnička,
Petr Bouř and Karel Volka

Tetrahedron: Asymmetry 13 (2002) 633



(+)-(1*R*,2*S*,4*R*,5*S*)-exo,exo-Dimethyl-bicyclo[2.2.1]heptane-2,5-dicarboxylate

E.e. = 95%

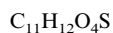
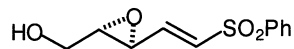
$[\alpha]_{546}^{16} = +40.0$ (*c* 0.1, CHCl₃)

Source of chirality: enantiospecific synthesis

Absolute configuration: 1*R*,2*S*,4*R*,5*S* (assigned by
chemical correlation)

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



(2*S*,3*S*,4*E*)-5-Benzenesulfonyl-2,3-epoxy-pent-4-en-1-ol

E.e., d.e. >95% (NMR)

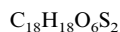
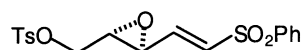
$[\alpha]_D^{20} = -11.7$ ($c = 1.90$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



(2*S*,3*S*,4*E*)-5-Benzenesulfonyl-2,3-epoxy-pent-4-en-1-yl tosylate

E.e., d.e. >95% (NMR)

$[\alpha]_D^{20} = -12.2$ ($c = 0.78$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration; 2*S*,3*S*

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



(2*S*,3*S*,4*E*)-5-Benzenesulfonyl-2,3-epoxy-pent-4-en-1-yl trifluoroacetate

E.e., d.e. >95% (NMR)

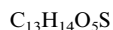
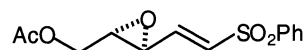
$[\alpha]_D^{20} = -20.5$ ($c = 0.92$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



(2*S*,3*S*,4*E*)-5-Benzenesulfonyl-2,3-epoxy-pent-4-en-1-yl acetate

E.e., d.e. >95% (NMR)

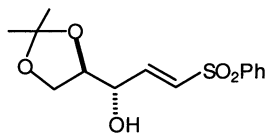
$[\alpha]_D^{20} = -40.6$ ($c = 1.17$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



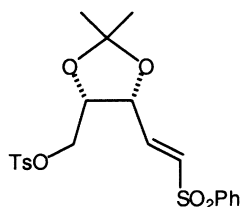
$C_{14}H_{18}O_5S$

(2*R*,3*S*,4*E*)-5-Benzenesulfonyl-1,2-isopropylidenedioxy-pent-4-en-ol

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = +11.3$ ($c = 0.60$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

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P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



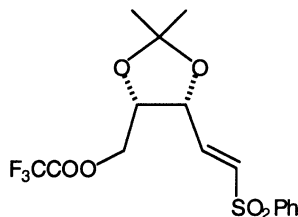
$C_{21}H_{24}O_5S_2$

(2*S*,3*R*,4*E*)-5-Benzenesulfonyl-2,3-isopropylidenedioxy-pent-4-en-1-yl tosylate

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = +3.8$ ($c = 1.05$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*R*

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



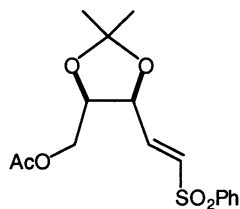
$C_{26}H_{27}F_3O_6S$

(2*S*,3*R*,4*E*)-5-Benzenesulfonyl-2,3-isopropylidenedioxy-pent-4-en-1-yl trifluoroacetate

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = +4.3$ ($c = 0.15$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*R*

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



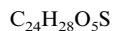
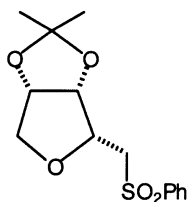
$C_{26}H_{20}O_6S$

(2*R*,3*S*,4*E*)-5-Benzenesulfonyl-2,3-isopropylidenedioxy-pent-4-en-1-yl acetate

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = -5.0$ ($c = 0.42$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*

David Díez,* M. Templo Beneitez, Isidro S. Marcos, N. M. Garrido,
P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639

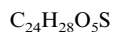
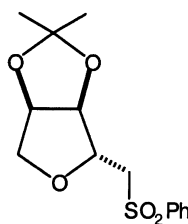


(2*R*,3*R*,4*S*)-2-Benzenesulfonylmethyl-3,4-isopropylidenedioxy-tetrahydrofuran

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = +18.0$ ($c=0.25$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*R*,4*S*

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Tetrahedron: Asymmetry 13 (2002) 639

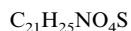
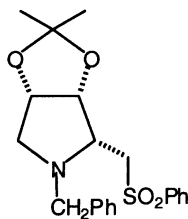


(2*R*,3*S*,4*R*)-2-Benzenesulfonylmethyl-3,4-isopropylidenedioxy-tetrahydrofuran

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = -14.0$ ($c=0.26$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*R*,3*S*,4*R*

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Tetrahedron: Asymmetry 13 (2002) 639

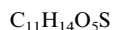
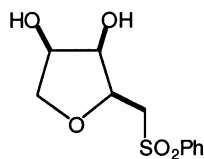


(2*R*,3*R*,4*S*)-*N*-Benzyl-2-benzenesulfonylmethyl-3,4-isopropylidenedioxy-pyrrolidine

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = +40.2$ ($c=0.94$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*S*,4*R*

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Tetrahedron: Asymmetry 13 (2002) 639

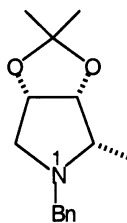


(2*S*,3*R*,4*R*)-2-Benzenesulfonylmethyl-tetrahydrofuran-3,4-diol

E.e., d.e. >95% (NMR)
 $[\alpha]_D^{20} = -2.1$ ($c=0.68$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*R*,4*R*

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P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



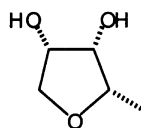
C₁₅H₂₁NO₂

(2*S*,3*R*,4*S*)-*N*-Benzyl-3,4-isopropylidenedioxy-2-methylpyrrolidine

E.e., d.e. >95% (NMR)
[α]_D²⁰ = +33.4 (c = 0.70, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*R*,4*S*

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P. Basabe and Julio G. Urones

Tetrahedron: Asymmetry 13 (2002) 639



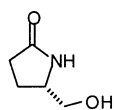
C₅H₁₀O₃

(2*S*,3*S*,4*S*)-2-Methyl-tetrahydrofuran-3,4-diol

E.e., d.e. >95% (NMR)
[α]_D²⁰ = +8.0 (c = 0.50, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: 2*S*,3*S*,4*S*

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Tetrahedron: Asymmetry 13 (2002) 647



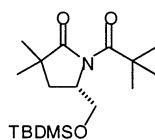
C₅H₉NO₂

(5*S*)-5-Hydroxymethyl-pyrrolidin-2-one

[α]_D²² = +31.8 (c 5.0, EtOH)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



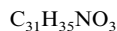
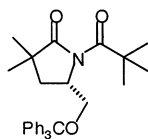
C₁₈H₃₅NO₃Si

(5*S*)-(tert-Butyl-dimethylsiloxymethyl)-1-(2,2-dimethyl-propionyl)-3,3-dimethyl-pyrrolidin-2-one

[α]_D²⁷ = -41.0 (c 0.8, CHCl₃)
Source of chirality: (*S*)-pyroglutamic acid
Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



(5*S*)-1-(2,2-Dimethylpropionyl)-3,3-dimethyl-5-trityloxymethyl-pyrrolidin-2-one

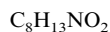
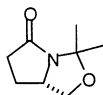
$$[\alpha]_D^{22} = -44.0 \text{ (} c \text{ 0.5, CHCl}_3\text{)}$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



(5*S*)-1-Aza-2,2-dimethyl-3-oxa-8-oxo-bicyclo[3,3,0]octane

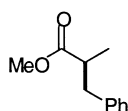
$$[\alpha]_D^{25} = +114.7 \text{ (} c \text{ 1.0, CHCl}_3\text{)}$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



Methyl (*R*)-2-benzyl-propionate

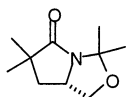
$$[\alpha]_D^{25} = +34.5 \text{ (} c \text{ 0.8, CHCl}_3\text{)}$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

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Tetrahedron: Asymmetry 13 (2002) 647



(5*S*)-1-Aza-2,2-dimethyl-7,7-dimethyl-3-oxa-8-oxo-bicyclo[3,3,0]octane

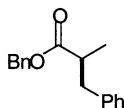
$$[\alpha]_D^{25} = +75.3 \text{ (} c \text{ 1.0, CHCl}_3\text{)}$$

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



C₁₈H₂₀O₂

Benzyl (*S*)-2-benzyl-propionate

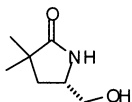
$[\alpha]_D^{25} = +25.7$ (*c* 0.8, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



C₇H₁₃NO₂

(*5S*)-3,3-Dimethyl-5-hydroxymethyl-pyrrolidin-2-one

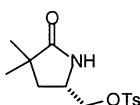
$[\alpha]_D^{25} = +82.6$ (*c* 1.0, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



C₁₄H₁₉NO₄S

(*5S*)-*O-p*-Toluenesulfonylmethyl-3,3-dimethyl-5-pyrrolidin-2-one

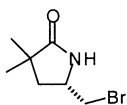
$[\alpha]_D^{25} = +21.6$ (*c* 0.5, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



C₇H₁₂BrNO

(*5S*)-5-Bromomethyl-3,3-dimethyl-pyrrolidin-2-one

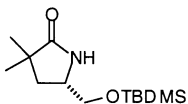
$[\alpha]_D^{25} = +25.4$ (*c* 1.0, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{13}H_{27}NO_2Si$

(5*S*)-(+)-5-*tert*-Butyltrimethylsilyloxymethyl-3,3-dimethyl-pyrrolidin-2-one

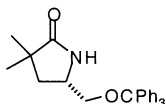
$[\alpha]_D^{22} = +46.8$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{26}H_{27}NO_2$

(5*S*)-(+)-3,3-Dimethyl-5-trityloxymethyl-pyrrolidin-2-one

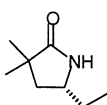
$[\alpha]_D^{24} = +10.6$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_8H_{15}NO$

(5*R*)-(-)-5-Ethyl-3,3-dimethyl-pyrrolidin-2-one

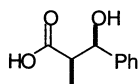
$[\alpha]_D^{22} = -28.0$ (*c* 2.0, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{11}H_{14}O_3$

(2*R*,3*R*)-3-Hydroxy-2-methyl-3-phenylpropionic acid

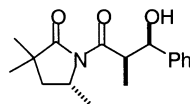
$[\alpha]_D^{21} = +26.8$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

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

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{17}H_{23}NO_3$

(2'*R*,3'*R*,5*R*)-1-(3'-Hydroxy-2'-methyl-3'-phenyl-1'-oxopropyl)-3,3-dimethyl-2-pyrrolidinone

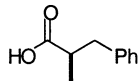
$[\alpha]_D^{25} = -26.9$ (*c* 0.7, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: 2'*R*,3'*R*,5*R*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{10}H_{12}O_2$

(*S*)-2-Benzyl-propanoic acid

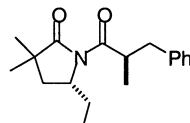
$[\alpha]_D^{25} = +28.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



$C_{18}H_{25}NO_2$

(2'*R*,5*R*)-1-(1'-Oxopropyl-2'-phenylmethyl)-5-ethyl-3,3-dimethyl-pyrrolidin-2-one

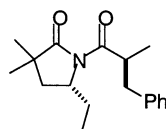
$[\alpha]_D^{25} = -86.4$ (*c* 0.9, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

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

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



$C_{18}H_{25}NO_2$

(2'*S*,5*R*)-1-(1'-Oxopropyl-2'-phenylmethyl)-5-ethyl-3,3-dimethyl-pyrrolidin-2-one

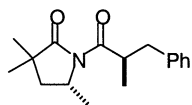
$[\alpha]_D^{25} = -42.3$ (*c* 0.6, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

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

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Jeremy C. Proddger and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



$C_{17}H_{23}NO_2$

(2'*R*,5*R*)-1-(1'-Oxopropyl-2'-phenylmethyl)-3,3-dimethyl-5-methyl-pyrrolidin-2-one

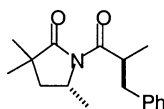
$[\alpha]_D^{25} = -76$ (*c* 0.6, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

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

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Proddger and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



$C_{17}H_{23}NO_2$

(2'*S*,5*R*)-1-(1'-Oxopropyl-2'-phenylmethyl)-3,3-dimethyl-5-methyl-pyrrolidin-2-one

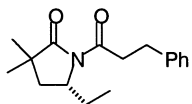
$[\alpha]_D^{25} = -20.0$ (*c* 0.6, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

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

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Proddger and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



$C_{17}H_{23}NO_2$

(5*R*)-1-(1'-Oxopropyl-3'-phenyl)-5-ethyl-3,3-dimethyl-pyrrolidin-2-one

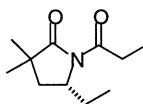
$[\alpha]_D^{25} = -71.2$ (*c* 0.53, CH_2Cl_2)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

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Tetrahedron: Asymmetry 13 (2002) 647



$C_{11}H_{19}NO_2$

(5*R*)-1-(1'-Oxopropyl)-5-ethyl-3,3-dimethyl-pyrrolidin-2-one

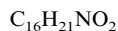
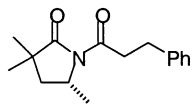
$[\alpha]_D^{25} = -121.2$ (*c* 0.8, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



(5*R*)-1-(1'-Oxopropyl-3'-phenyl)-5-methyl-3,3-dimethyl-pyrrolidin-2-one

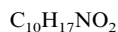
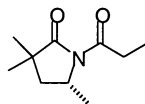
$[\alpha]_D^{25} = -64$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



(5*R*)-1-(1'-Oxopropyl)-5-methyl-3,3-dimethyl-2-pyrrolidinone

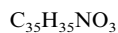
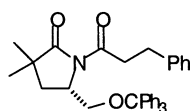
$[\alpha]_D^{25} = -101$ (*c* 0.5, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

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Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



(5*S*)-3,3-Dimethyl-5-triphenylmethoxymethyl-1-(1'-phenylpropionyl)-pyrrolidin-2-one

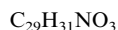
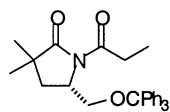
$[\alpha]_D^{25} = -43.3$ (*c* 0.15, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Prodder and Hitesh J. Sanganeer

Tetrahedron: Asymmetry 13 (2002) 647



(5*S*)-3,3-Dimethyl-5-triphenylmethoxymethyl-1-propionyl-pyrrolidin-2-one

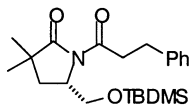
$[\alpha]_D^{25} = -77.7$ (*c* 0.09, $CHCl_3$)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Tetrahedron: Asymmetry 13 (2002) 647



C₂₂H₃₅NO₃Si

(5*S*)-*tert*-Butyltrimethylsilyloxymethyl-3,3-dimethyl-1-(3-phenylpropionyl)-pyrrolidin-2-one

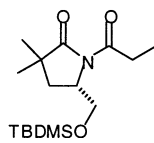
$[\alpha]_D^{25} = -68.5$ (*c* 0.2, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

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Jeremy C. Proddger and Hitesh J. Sanganee

Tetrahedron: Asymmetry 13 (2002) 647



C₁₆H₃₁NO₂

(5*S*)-*tert*-Butyltrimethylsilyloxymethyl-3,3-dimethyl-1-propionyl-pyrrolidin-2-one

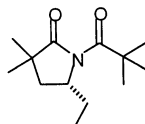
$[\alpha]_D^{24} = -78.6$ (*c* 0.5, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *S*

Stephen G. Davies,* Darren J. Dixon, Gilles J.-M. Doisneau,
Jeremy C. Proddger and Hitesh J. Sanganee

Tetrahedron: Asymmetry 13 (2002) 647



C₁₃H₂₃NO₂

(5*R*)-1-(2',2'-Dimethyl-1'-oxopropyl)-5-ethyl-3,3-dimethyl-pyrrolidin-2-one

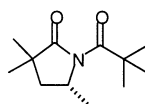
$[\alpha]_D^{21} = -3.0$ (*c* 0.4, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

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Jeremy C. Proddger and Hitesh J. Sanganee

Tetrahedron: Asymmetry 13 (2002) 647



C₁₂H₂₁NO₂

(5*R*)-1-(2',2'-Dimethyl-1'-oxopropyl)-5-methyl-3,3-dimethyl-pyrrolidin-2-one

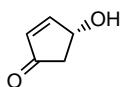
$[\alpha]_D^{22} = +9.0$ (*c* 0.5, CHCl₃)

Source of chirality: (*S*)-pyroglutamic acid

Absolute configuration: *R*

Ayhan S. Demir* and Ozge Sesenoglu

Tetrahedron: Asymmetry 13 (2002) 667



(*R*)-4-Hydroxy-3-cyclopent-2-en-1-one

E.e. = 98%

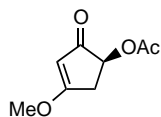
$[\alpha]_D^{20} = +78$ (*c* 1.2, $CHCl_3$)

Source of chirality: enzyme-catalyzed hydrolysis

Absolute configuration: *R*

Ayhan S. Demir* and Ozge Sesenoglu

Tetrahedron: Asymmetry 13 (2002) 667



(*S*)-5-Acetoxy-3-methoxycyclopent-2-en-1-one

E.e. >97%

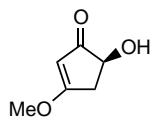
$[\alpha]_D^{20} = +29$ (*c* 1.6, $CHCl_3$)

Source of chirality: enzyme-catalyzed hydrolysis

Absolute configuration: *S*

Ayhan S. Demir* and Ozge Sesenoglu

Tetrahedron: Asymmetry 13 (2002) 667



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

E.e. >98%

$[\alpha]_D^{20} = -18$ (*c* 0.5, $CHCl_3$)

Source of chirality: enzyme-catalyzed hydrolysis

Absolute configuration: *S*