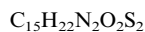
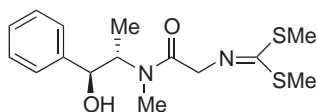


Gabriela Guillena and Carmen Nájera*

Tetrahedron: Asymmetry 12 (2001) 181(1*S*,2*S*)-*N*-(2-Hydroxy-1-methyl-2-phenethyl)-2'-(dimethylsulfanylmethylene)-amino-*N*-methylacetamide

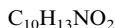
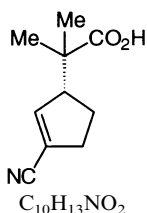
Ee = 100%

 $[\alpha]_{\text{D}}^{25} = +146.2$ (*c* 1.9, CHCl₃)

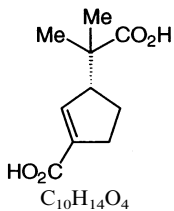
Source of chirality: (+)-Pseudoephedrine

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

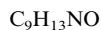
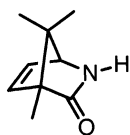
Antonio García Martínez,* Enrique Teso Vilar, Amelia García Fraile, Santiago de la Moya Cerero* and Beatriz Lora Maroto

Tetrahedron: Asymmetry 12 (2001) 189(1*R*)- α,α -Dimethyl-3-cyanocyclopent-2-eneacetic acid $[\alpha]_{\text{D}}^{20} = +69.6$ (*c* 1.40, CH₂Cl₂)Source of chirality: (1*R*)-3-*endo*-bromocamphor and stereospecific synthesisAbsolute configuration: *R*

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

Tetrahedron: Asymmetry 12 (2001) 189(1*R*)- α,α -Dimethyl-3-carboxycyclopent-2-eneacetic acid $[\alpha]_{\text{D}}^{20} = +30.1$ (*c* 1.84, CH₂Cl₂)Source of chirality: (1*R*)-3-*endo*-bromocamphor and stereospecific synthesisAbsolute configuration: *R*

Robert K. Boeckman, Jr.,* Michelle A. Laci and Alan T. Johnson

Tetrahedron: Asymmetry 12 (2001) 205(1*S*,4*R*)-4,7,7-Trimethyl-2-azabicyclo[2.2.1]-5-hepten-3-one

Ee = 100%

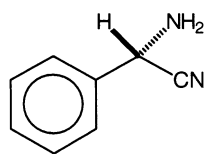
 $[\alpha]_{\text{D}}^{23} = -284.3$ (*c* 1.8, CH₂Cl₂)

Source of chirality: camphoric acid

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

P. López-Serrano, J. A. Jongejan, F. van Rantwijk and R. A. Sheldon*

Tetrahedron: Asymmetry 12 (2001) 219



C₈H₈N

(*S*)-2-Amino-2-phenylacetonitrile

Ee = 97%

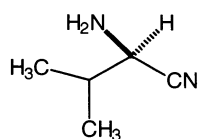
[α]_D = -27.5 (c 1, CH₂Cl₂)

Source of chirality: crystallisation with tartaric acid

Absolute configuration: *S*

P. López-Serrano, J. A. Jongejan, F. van Rantwijk and R. A. Sheldon*

Tetrahedron: Asymmetry 12 (2001) 219



C₅H₁₀N₂

(*R*)-2-Amino-3,3-dimethylpropionitrile

Ee = 97%

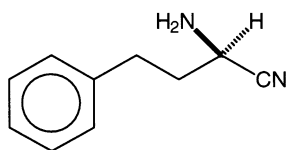
[α]_D = +13.3 (c 1, CH₂Cl₂)

Source of chirality: crystallisation with tartaric acid

Absolute configuration: *R*

P. López-Serrano, J. A. Jongejan, F. van Rantwijk and R. A. Sheldon*

Tetrahedron: Asymmetry 12 (2001) 219



C₁₀H₁₂N₂

(*R*)-2-Amino-4-phenylbutyronitrile

Ee = 98%

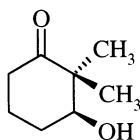
[α]_D = -11.5 (c 1, CH₂Cl₂)

Source of chirality: crystallisation with tartaric acid

Absolute configuration: *R*

Zhi-Liang Wei, Zu-Yi Li* and Guo-Qiang Lin*

Tetrahedron: Asymmetry 12 (2001) 229



(*S*)-3-Hydroxy-2,2-dimethylcyclohexanone

Ee = >96%

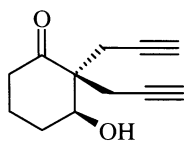
[α]_D²⁵ = +22.5 (c 2.0, CHCl₃)

Source of chirality: microbial transformation

Absolute configuration: *S*

Zhi-Liang Wei, Zu-Yi Li* and Guo-Qiang Lin*

Tetrahedron: Asymmetry 12 (2001) 229



(*S*)-3-Hydroxy-2,2-di(prop-2-ynyl)cyclohexanone

Ee = >96%

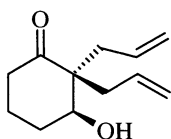
$[\alpha]_D^{20} = -3.5$ (*c* 2.0, CHCl₃)

Source of chirality: microbial transformation

Absolute configuration: *S*

Zhi-Liang Wei, Zu-Yi Li* and Guo-Qiang Lin*

Tetrahedron: Asymmetry 12 (2001) 229



(*S*)-2,2-Diallyl-3-hydroxycyclohexanone

Ee = 98.4%

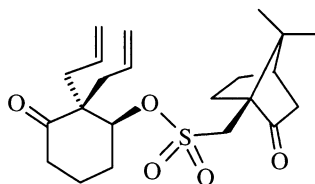
$[\alpha]_D^{20} = +11$ (*c* 2.2, CHCl₃)

Source of chirality: microbial transformation

Absolute configuration: *S*

Zhi-Liang Wei, Zu-Yi Li* and Guo-Qiang Lin*

Tetrahedron: Asymmetry 12 (2001) 229



(*S*)-2,2-Diallyl-3-oxocyclohexanol 3-(+)-camphorsulfonate

Ee = 98.4%

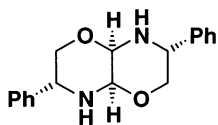
$[\alpha]_D^{20} = +43.6$ (*c* 0.2, CHCl₃)

Source of chirality: microbial transformation

Absolute configuration: *S,S*

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan,
Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



C₁₈H₂₀N₂O₂

(3*R*,7*R*,4*aR*,8*aR*)-3,7-*cis*-Perhydro-[1,4]oxazino-[3,2-*b*]-1,4-oxazine

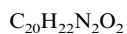
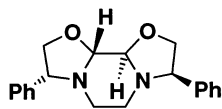
$[\alpha]_D^{25} = -164.6$ (*c* = 0.1, CH₂Cl₂)

Source of chirality: (*R*)-(-)-phenylglycinol

Absolute configuration: (3*R*,7*R*,4*aR*,8*aR*)

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan,
Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(2*R*,2'*R*,4*R*,4'*R*)-*N,N'*-Ethylene(4,4'-diphenyl)-2,2'-bisoxazolidine

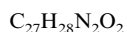
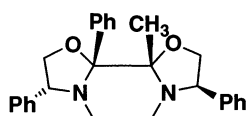
$[\alpha]_D^{25} = -245.79$ ($c = 0.107$, CH_2Cl_2)

Source of chirality: (*R*)-(-)-phenylglycinol

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

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan,
Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(2*R*,2'*S*,4*R*,4'*R*)-*N,N'*-Ethylene(2'-methyl-2,4,4'-triphenyl)-2,2'-bisoxazolidine

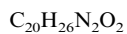
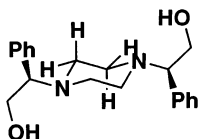
$[\alpha]_D^{25} = -145$ ($c = 0.94$, CH_2Cl_2)

Source of chirality: (*R*)-(-)-phenylglycinol

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

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan,
Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(1'*R*)-1,4-Bis-[(2'-hydroxy-1'-phenyl)ethyl]piperazine

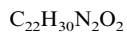
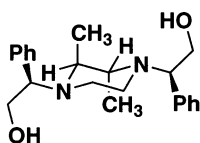
$[\alpha]_D^{25} = 21.77$ ($c = 0.107$, CH_2Cl_2)

Source of chirality: (*R*)-(-)-phenylglycinol

Absolute configuration: (1'*R*)

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan,
Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(1'*R*,2*S*)-1,4-Bis-[(2'-hydroxy-1'-phenyl)ethyl]-2,3-dimethylpiperazine

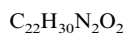
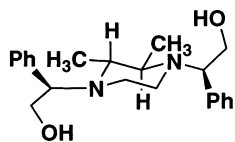
$[\alpha]_D^{25} = -28.2$ ($c = 0.156$, $CHCl_3$)

Source of chirality: (*R*)-(-)-phenylglycinol

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

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan, Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(1'*R*,2*R*)-1,4-Bis-[(2'-hydroxy-1'-phenyl)ethyl]-2,3-dimethylpiperazine

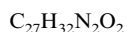
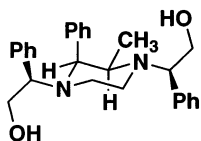
$[\alpha]_D^{25} = -47.17$ ($c = 0.106$, $CHCl_3$)

Source of chirality: (*R*)-(-)-phenylglycinol

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

Víctor Santes, Elizabeth Gómez, Verónica Zárata, Rosa Santillan, Norberto Farfán* and Susana Rojas-Lima

Tetrahedron: Asymmetry 12 (2001) 241



(1'*R*,2*S*,3*R*)-1,4-Bis-[(2'-hydroxy-1'-phenyl)ethyl]-2-phenyl-3-methyl-piperazine

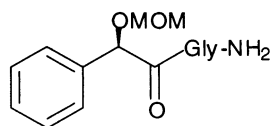
$[\alpha]_D^{25} = -81.1$ ($c = 0.172$, $CHCl_3$)

Source of chirality: (*R*)-(-)-phenylglycinol

Absolute configuration: (1'*R*,2*S*,3*R*)

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto, Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(*R*)-*O*-MOM-Mandelic-Gly-NH₂

Ee >99%

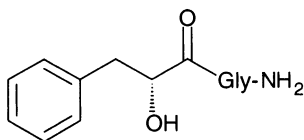
$[\alpha]_D^{26} = -57.6$ ($c = 1.54$, MeOH)

Source of chirality: natural

Absolute configuration: *R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto, Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(*R*)-Phenyllactic-Gly-NH₂

Ee >99%

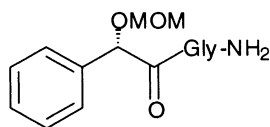
$[\alpha]_D^{26} = -72.9$ ($c = 0.23$, MeOH)

Source of chirality: natural

Absolute configuration: *R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

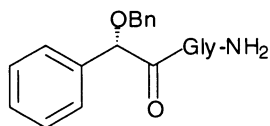


$C_{12}H_{16}N_2O_4$
(*S*)-*O*-MOM-Mandelic-Gly-NH₂

Ee >99%
 $[\alpha]_D^{24} = +56.7$ (c 1.78, MeOH)
Source of chirality: natural
Absolute configuration: *S*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

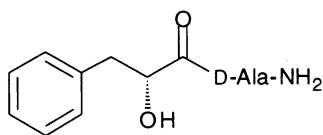


$C_{17}H_{18}N_2O_3$
(*S*)-*O*-Bn-Mandelic-Gly-NH₂

Ee >99%
 $[\alpha]_D^{24} = +6.8$ (c 0.78, MeOH)
Source of chirality: natural
Absolute configuration: *S*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

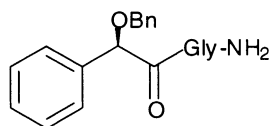


$C_{12}H_{16}N_2O_3$
(*R*)-Phenyllactic-D-Ala-NH₂

Ee >99%
 $[\alpha]_D^{27} = +54.0$ (c 0.71, MeOH)
Source of chirality: natural
Absolute configuration: *R,R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

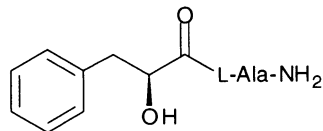


$C_{17}H_{18}N_2O_3$
(*R*)-*O*-Bn-Mandelic-Gly-NH₂

Ee >99%
 $[\alpha]_D^{24} = -6.1$ (c 1.29, MeOH)
Source of chirality: natural
Absolute configuration: *R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

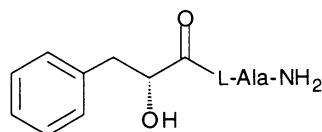


$C_{12}H_{16}N_2O_3$
(*S*)-Phenyllactic-Ala-NH₂

Ee >99%
[α]_D²⁷ = -55.1 (c 1.65, MeOH)
Source of chirality: natural
Absolute configuration: *S,S*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

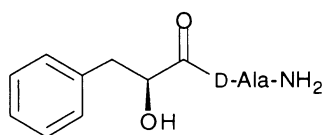


$C_{12}H_{16}N_2O_3$
(*R*)-Phenyllactic-L-Ala-NH₂

Ee >99%
[α]_D²⁷ = +52.6 (c 1.25, MeOH)
Source of chirality: natural
Absolute configuration: *R,S*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

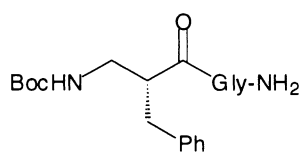


$C_{12}H_{16}N_2O_3$
(*S*)-Phenyllactic-D-Ala-NH₂

Ee >99%
[α]_D²⁷ = -52.5 (c 1.19, MeOH)
Source of chirality: natural
Absolute configuration: *S,R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249

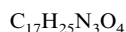
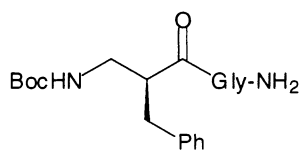


$C_{17}H_{25}N_3O_4$
(*R*)-3-[(*t*-Butyloxycarbonyl)amino]-2-benzylpropanoic-Gly-NH₂

Ee >99%
[α]_D²⁶ = +2.9 (c 0.70, MeOH)
Source of chirality: enzymatic enantiotropic
differentiation
Absolute configuration: *R*

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(S)-3-[(t-Butyloxycarbonyl)amino]-2-benzylpropanoic-Gly-NH₂

Ee >99%

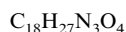
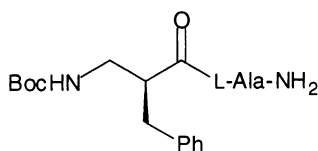
$[\alpha]_D^{25} = -3.8$ (c 0.16, MeOH)

Source of chirality: enzymatic enantiotropic
differentiation

Absolute configuration: S

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(S)-3-[(t-Butyloxycarbonyl)amino]-2-benzylpropanoic-L-Ala-NH₂

Ee >99%

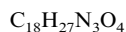
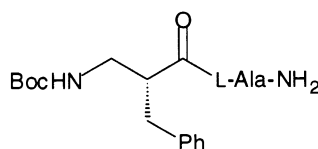
$[\alpha]_D^{24} = -11.3$ (c 0.46, MeOH)

Source of chirality: enzymatic, natural

Absolute configuration: S,S

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(R)-3-[(t-Butyloxycarbonyl)amino]-2-benzylpropanoic-L-Ala-NH₂

Ee >99%

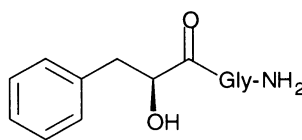
$[\alpha]_D^{24} = +9.7$ (c 0.64, MeOH)

Source of chirality: enzymatic, natural

Absolute configuration: R,S

Kanjai Khumtaveeporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(S)-Phenyllactic-Gly-NH₂

Ee >99%

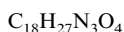
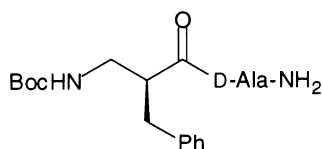
$[\alpha]_D^{26} = +72.1$ (c 0.19, MeOH)

Source of chirality: natural

Absolute configuration: S

Kanjai Khumtaveporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(*S*)-3-[(*t*-Butyloxycarbonyl)amino]-2-benzylpropanoic-D-Ala-NH₂

Ee >99%

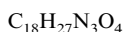
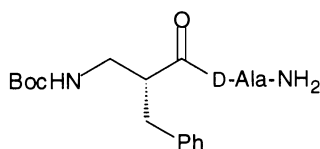
$[\alpha]_D^{24} = -9.4$ (*c* 0.47, MeOH)

Source of chirality: enzymatic, natural

Absolute configuration: *S,R*

Kanjai Khumtaveporn, Astrid Ullmann, Kazutsugu Matsumoto,
Benjamin G. Davis* and J. Bryan Jones*

Tetrahedron: Asymmetry 12 (2001) 249



(*R*)-3-[(*t*-Butyloxycarbonyl)amino]-2-benzylpropanoic-D-Ala-NH₂

Ee >99%

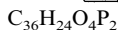
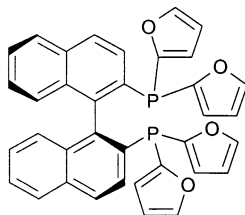
$[\alpha]_D^{24} = +11.7$ (*c* 1.33, MeOH)

Source of chirality: enzymatic, natural

Absolute configuration: *R,R*

Neil G. Andersen, Robert McDonald and Brian A. Keay*

Tetrahedron: Asymmetry 12 (2001) 263



(*S*_{ax})-2,2'-Bis(di-2-furylphosphino)-1,1'-binaphthalene

Ee = >98%

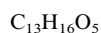
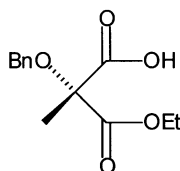
$[\alpha]_D^{19} = -78.3$ (*c* 0.95, CHCl₃)

Source of chirality: diastereomeric resolution

Absolute configuration: *S*_{ax}

Giuseppe Guanti,* Luca Banfi, Katharine Powles, Marcello Rasparini,
Carlo Scolastico and Novella Fossati

Tetrahedron: Asymmetry 12 (2001) 271



(*R*)-2-Benzyloxy-2-methylmalonic acid monoethyl ester

Ee = 93.0% [by NMR in the presence of (–)-ephedrine]

$[\alpha]_D^{25} = +9.54$ (*c* 2, EtOH)

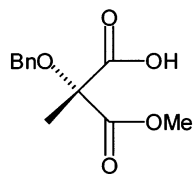
Source of chirality: enzymatic asymmetric

Absolute configuration: *R*

(assigned by chemical correlation)

Giuseppe Guanti,* Luca Banfi, Katharine Powles, Marcello Rasparini,
Carlo Scolastico and Novella Fossati

Tetrahedron: Asymmetry 12 (2001) 271



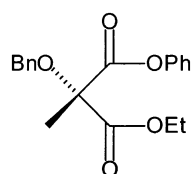
C₁₂H₁₄O₅

(*R*)-2-Benzyloxy-2-methylmalonic acid monomethyl ester

Ee = 89.0% [by NMR in the presence of (-)-ephedrine]
[α]_D²⁵ = +5.27 (*c* 2.1, CHCl₃)
Source of chirality: enzymatic asymmetric
Absolute configuration: *R*
(assigned by [α]_D and NMR analogy with
the corresponding monoethyl ester)

Giuseppe Guanti,* Luca Banfi, Katharine Powles, Marcello Rasparini,
Carlo Scolastico and Novella Fossati

Tetrahedron: Asymmetry 12 (2001) 271



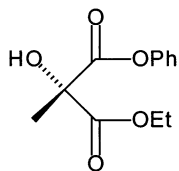
C₁₉H₂₀O₅

(*S*)-2-Benzyloxy-2-methylmalonic acid ethyl ester phenyl ester

Ee = 93.0% [by NMR in the presence of Eu(hfc)₃]
[α]_D²⁵ = +9.46 (*c* 1.65, CHCl₃)
Source of chirality: enzymatic asymmetric
Absolute configuration: *S*
(assigned by chemical correlation)

Giuseppe Guanti,* Luca Banfi, Katharine Powles, Marcello Rasparini,
Carlo Scolastico and Novella Fossati

Tetrahedron: Asymmetry 12 (2001) 271



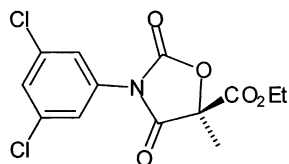
C₁₂H₁₄O₅

(*S*)-2-Hydroxy-2-methylmalonic acid ethyl ester phenyl ester

Ee = 93.0% [by NMR in the presence of Eu(hfc)₃]
[α]_D²⁵ = -0.45 (*c* 2.1, CHCl₃)
Source of chirality: enzymatic asymmetric
Absolute configuration: *S*
(assigned by chemical correlation)

Giuseppe Guanti,* Luca Banfi, Katharine Powles, Marcello Rasparini,
Carlo Scolastico and Novella Fossati

Tetrahedron: Asymmetry 12 (2001) 271



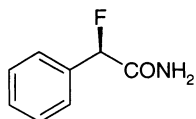
C₁₃H₁₁Cl₂O₅

(*R*)-3-(3,5-Dichloro-phenyl)-5-methyl-2,4-dioxoxazolidine-5-carboxylic acid ethyl ester

Ee >96.0% [by NMR in the presence of Eu(hfc)₃]
[α]_D²⁵ = -16.79 (*c* 2.0, CHCl₃)
Source of chirality: enzymatic asymmetric
Absolute configuration: *R*
(assigned by chemical correlation)

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



C_8H_8FNO
(*R*)-2-Fluoro-2-phenylacetamide

Ee = >99%

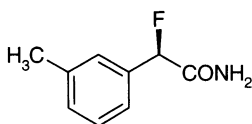
$[\alpha]_D^{20} = +122.3$ (c 0.90, $CHCl_3$)

Source of chirality: nitrilase catalysed kinetic resolution of the respective 2-fluoroethanenitrile

Absolute configuration: 2*R*

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



$C_9H_{10}FNO$
(*R*)-2-Fluoro-2-(3-methylphenyl)acetamide

Ee = 97%

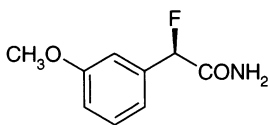
$[\alpha]_D^{20} = +107.3$ (c 0.70, $CHCl_3$)

Source of chirality: nitrilase catalysed kinetic resolution of the respective 2-fluoroethanenitrile

Absolute configuration: 2*R*

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



$C_9H_{10}FNO_2$
(*R*)-2-Fluoro-2-(3-methoxyphenyl)acetamide

Ee = >99%

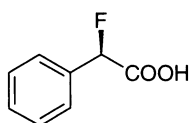
$[\alpha]_D^{20} = +141.8$ (c 1.00, $CHCl_3$)

Source of chirality: nitrilase catalysed kinetic resolution of the respective 2-fluoroethanenitrile

Absolute configuration: 2*R*

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



$C_8H_7FO_2$
(*R*)-2-Fluoro-2-phenylacetic acid

Ee = >99%

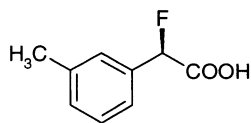
$[\alpha]_D^{20} = +150.3$ (c 1.00, $CHCl_3$)

Source of chirality: hydrolysis of the respective 2-fluoroacetamide

Absolute configuration: 2*R*

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



C₉H₉FO₂

(*R*)-2-Fluoro-2-(3-methylphenyl)acetic acid

Ee = 98%

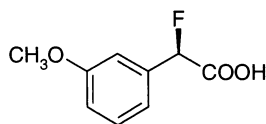
[α]_D²⁰ = +137.4 (c 1.00, CHCl₃)

Source of chirality: hydrolysis of the respective 2-fluoroacetamide

Absolute configuration: 2*R*

Franz Effenberger* and Steffen Oßwald

Tetrahedron: Asymmetry 12 (2001) 279



C₉H₉FO₃

(*R*)-2-Fluoro-2-(3-methoxyphenyl)acetic acid

Ee = >99%

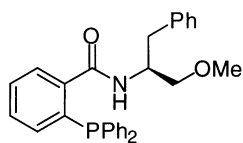
[α]_D²⁰ = +154.0 (c 1.00, CHCl₃)

Source of chirality: hydrolysis of the respective 2-fluoroacetamide

Absolute configuration: 2*R*

Takashi Mino,* Kohki Kashihara and Masakazu Yamashita

Tetrahedron: Asymmetry 12 (2001) 287



C₂₉H₂₈NO₂P

(*S*)-*N*-(1-Benzyl-2-methoxyethyl)-2-(diphenylphosphino)benzamide

Ee = >95%

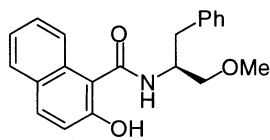
[α]_D²⁰ = -14.5 (c 0.80, CHCl₃)

Source of chirality: (*S*)-(+)-2-amino-1-methoxy-3-phenylpropane

Absolute configuration: *S*

Takashi Mino,* Kohki Kashihara and Masakazu Yamashita

Tetrahedron: Asymmetry 12 (2001) 287



C₂₁H₂₁NO₃

(*S*)-*N*-(1-Benzyl-2-methoxyethyl)-2-hydroxynaphthalenecarboxamide

Ee = >95%

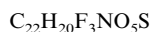
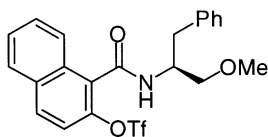
[α]_D²⁵ = -54.4 (c 0.16, CHCl₃)

Source of chirality: (*S*)-(+)-2-amino-1-methoxy-3-phenylpropane

Absolute configuration: *S*

Takashi Mino,* Kohki Kashihara and Masakazu Yamashita

Tetrahedron: Asymmetry 12 (2001) 287



(*S*)-*N*-(1-Benzyl-2-methoxyethyl)-2-(trifluoromethanesulfonyloxy)naphthalenecarboxamide

Ee = >95%

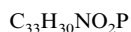
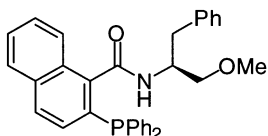
$[\alpha]_D^{25} = -23.7$ (c 0.35, $CHCl_3$)

Source of chirality: (*S*)-(+)-2-amino-1-methoxy-3-phenylpropane

Absolute configuration: *S*

Takashi Mino,* Kohki Kashihara and Masakazu Yamashita

Tetrahedron: Asymmetry 12 (2001) 287



(*S*)-*N*-(1-Benzyl-2-methoxyethyl)-2-(diphenylphosphino)naphthalenecarboxamide

Ee = >95%

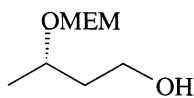
$[\alpha]_D^{25} = -18.7$ (c 0.17, $CHCl_3$)

Source of chirality: (*S*)-(+)-2-amino-1-methoxy-3-phenylpropane

Absolute configuration: *S*

Isidoro Izquierdo,* María T. Plaza, Miguel Rodríguez,
Juan A. Tamayo and Alicia Martos

Tetrahedron: Asymmetry 12 (2001) 293



(*S*)-3-*O*-(2-Methoxyethoxymethyl)-1,3-butanediol

$[\alpha]_D = +96$ (c 1.3, chloroform)

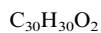
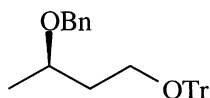
Source of chirality: chemoenzymatic resolution

Absolute configuration: *S*

(assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Miguel Rodríguez,
Juan A. Tamayo and Alicia Martos

Tetrahedron: Asymmetry 12 (2001) 293



(*R*)-3-*O*-Benzyl-1-*O*-trityl-1,3-butanediol

$[\alpha]_D = -8$ (c 1, chloroform)

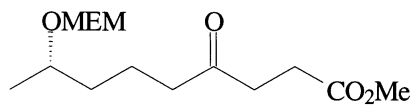
Source of chirality: chemoenzymatic resolution

Absolute configuration: *R*

(assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Miguel Rodríguez,
Juan A. Tamayo and Alicia Martos

Tetrahedron: Asymmetry 12 (2001) 293



C₁₄H₂₆O₆

Methyl (*S*)-8-*O*-(2-methoxyethoxymethyl)-4-oxononanoate

$[\alpha]_D = +11$ (*c* 1.7, chloroform)

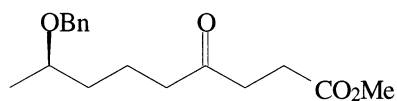
Source of chirality: chemoenzymatic resolution

Absolute configuration: *S*

(assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Miguel Rodríguez,
Juan A. Tamayo and Alicia Martos

Tetrahedron: Asymmetry 12 (2001) 293



C₁₇H₂₄O₄

Methyl (*R*)-8-benzyloxy-4-oxononanoate

$[\alpha]_D = -16$ (*c* 1, chloroform)

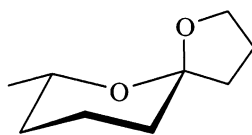
Source of chirality: chemoenzymatic resolution

Absolute configuration: *R*

(assigned by chemical correlation)

Isidoro Izquierdo,* María T. Plaza, Miguel Rodríguez,
Juan A. Tamayo and Alicia Martos

Tetrahedron: Asymmetry 12 (2001) 293



C₉H₁₆O₂

(*5S,7S*)-7-Methyl-1,6-dioxaspiro[4.5]decane

Ee = 91%

$[\alpha]_D = -87$ (*c* 1, *n*-pentane)

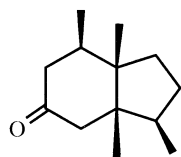
Source of chirality: chemoenzymatic resolution

Absolute configuration: (*5S,7S*)

(assigned by comparison with literature data
and chemical correlation)

Motoo Tori,* Chiho Makino, Kenji Hisazumi, Masakazu Sono
and Katsuyuki Nakashima

Tetrahedron: Asymmetry 12 (2001) 301



C₁₃H₂₂O

(*1S,5R,6S,9R*)-1,5,6,9-Tetramethylbicyclo[4.3.0]nonan-3-one

Ee = 99.5%

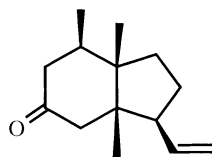
$[\alpha]_D^{25} = -22.6$ (*c* 0.15, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*1S,5R,6S,9R*)

Motoo Tori,* Chiho Makino, Kenji Hisazumi, Masakazu Sono and Katsuyuki Nakashima

Tetrahedron: Asymmetry 12 (2001) 301



C₁₄H₂₂O

(1*S*,5*R*,6*S*,9*S*)-1,5,6-Trimethyl-9-vinylbicyclo[4.3.0]nonan-3-one

Ee = 99.5%

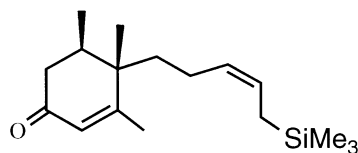
[α]_D²⁰ = -18.0 (*c* 1.18, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*,5*R*,6*S*,9*S*)

Motoo Tori,* Chiho Makino, Kenji Hisazumi, Masakazu Sono and Katsuyuki Nakashima

Tetrahedron: Asymmetry 12 (2001) 301



C₁₇H₃₀OSi

(4*S*,5*R*)-3,4,5-Trimethyl-4-[3'*Z*-5'-trimethylsilyl-3'-pentenyl]cyclohex-2-en-1-one

Ee = 99.5%

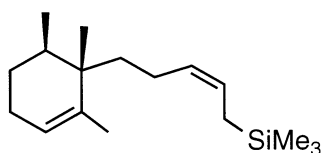
[α]_D²¹ = +8.9 (*c* 0.66, CHCl₃)

Source of chirality: asymmetric synthesis

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

Motoo Tori,* Chiho Makino, Kenji Hisazumi, Masakazu Sono and Katsuyuki Nakashima

Tetrahedron: Asymmetry 12 (2001) 301



C₁₇H₃₂Si

(3*S*,4*R*)-2,3,4-Trimethyl-3-[3'*Z*-5'-trimethylsilyl-3'-pentenyl]cyclohexene

Ee = 99.5%

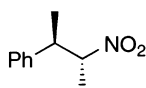
[α]_D²¹ = +43.0 (*c* 0.86, CHCl₃)

Source of chirality: asymmetric synthesis

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



C₁₀H₁₃NO₂

(2*R*,3*R*)-3-Phenyl-2-nitrobutane

Ee = 98%

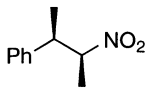
[α]_D = +8.5 (*c* 1.0, EtOH)

Source of chirality: microbial reduction

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



$C_{10}H_{13}NO_2$

(2*S*,3*R*)-3-Phenyl-2-nitrobutane

Ee = 97%

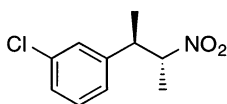
$[\alpha]_D = +91.5$ (*c* 1.0, EtOH)

Source of chirality: microbial reduction

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



$C_{10}H_{12}ClNO_2$

(2*R*,3*R*)-3-(3'-Chlorophenyl)-2-nitrobutane

Ee = 82%

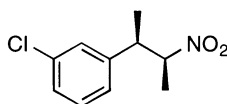
$[\alpha]_D = +7.5$ (*c* 1.0, EtOH)

Source of chirality: microbial reduction

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



$C_{10}H_{12}ClNO_2$

(2*S*,3*R*)-3-(3'-Chlorophenyl)-2-nitrobutane

Ee = 81%

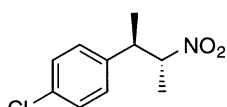
$[\alpha]_D = +54.8$ (*c* 0.90, EtOH)

Source of chirality: microbial reduction

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



$C_{10}H_{12}ClNO_2$

(2*R*,3*R*)-3-(4'-Chlorophenyl)-2-nitrobutane

Ee = 94%

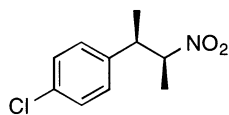
$[\alpha]_D = +8.2$ (*c* 1.0, EtOH)

Source of chirality: microbial reduction

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

Yasushi Kawai,* Yoshikazu Inaba and Norihiro Tokitoh

Tetrahedron: Asymmetry 12 (2001) 309



C₁₀H₁₂ClNO₂

(2*S*,3*R*)-3-(4'-Chlorophenyl)-2-nitrobutane

Ee = 92%

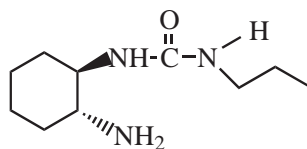
[α]_D = +82.6 (c 1.0, EtOH)

Source of chirality: microbial reduction

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

Catherine Bied, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 12 (2001) 329



C₁₀H₂₁N₃O

(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-*n*-propylurea

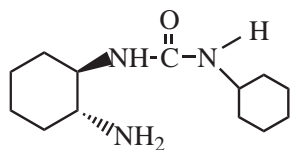
[α]_D²² = -1.7 (c = 5, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

Catherine Bied, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 12 (2001) 329



C₁₃H₂₅N₃O

(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-cyclohexylurea

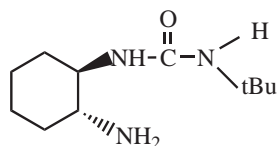
[α]_D²² = -2.4 (c = 5, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

Catherine Bied, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 12 (2001) 329



C₁₁H₂₃N₃O

(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-*tert*-butylurea

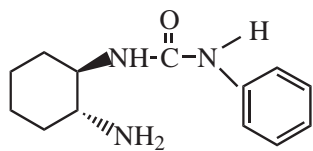
[α]_D²² = -5.8 (c = 5, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

Catherine Bied, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 12 (2001) 329



(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-phenylurea

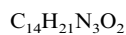
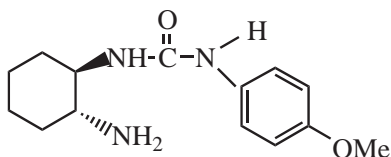
$[\alpha]_D^{22} = -19.5$ ($c = 5$, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-4-methoxyphenylurea

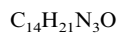
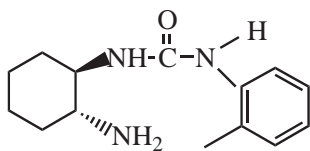
$[\alpha]_D^{22} = -3.6$ ($c = 5$, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-2-tolylurea

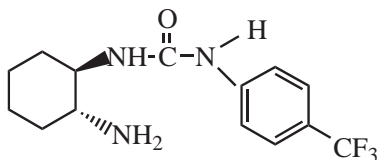
$[\alpha]_D^{22} = -4.7$ ($c = 5$, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-4-trifluoromethylphenylurea

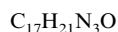
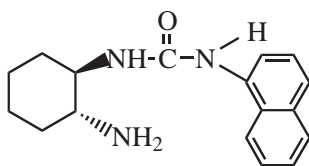
$[\alpha]_D^{22} = -5.2$ ($c = 5$, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(-)-(1*R*,2*R*)-1,2-Diaminocyclohexane-1-naphthylurea

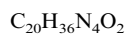
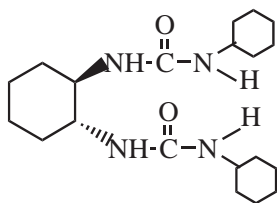
$[\alpha]_D^{22} = -2.9$ ($c = 2$, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(+)-(1*R*,2*R*)-1,2-Diaminocyclohexane-cyclohexyldiurea

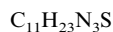
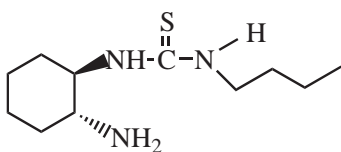
$[\alpha]_D^{22} = +0.28$ ($c = 1$, CHCl₃/EtOH 1:1)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(+)-(1*R*,2*R*)-1,2-Diaminocyclohexane-*n*-butylthiourea

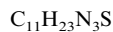
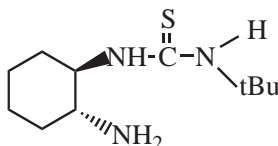
$[\alpha]_D^{22} = +5.3$ ($c = 5$, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

Catherine Bied, Joël J. E. Moreau* and Michel Wong Chi Man

Tetrahedron: Asymmetry 12 (2001) 329



(+)-(1*R*,2*R*)-1,2-Diaminocyclohexane-*tert*-butylthiourea

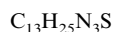
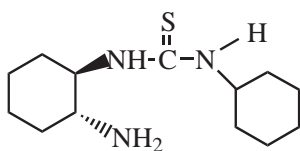
$[\alpha]_D^{22} = +6.5$ ($c = 5$, CHCl₃)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 329



(+)-(1*R*,2*R*)-1,2-Diaminocyclohexane-cyclohexylthiourea

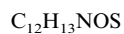
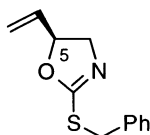
$[\alpha]_D^{25} = +7.5$ ($c = 5$, $CHCl_3$)

Source of chirality: (1*R*,2*R*)-1,2-diaminocyclohexane obtained by optical resolution

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

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Tetrahedron: Asymmetry 12 (2001) 337



(5*S*)-2-Benzylthio-5-vinyl- Δ^2 -1,3-oxazoline

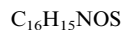
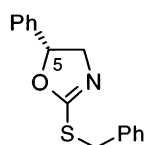
$[\alpha]_D = -13$ ($c 1$, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 5*S*

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Tetrahedron: Asymmetry 12 (2001) 337



(5*R*)-2-Benzylthio-5-phenyl- Δ^2 -1,3-oxazoline

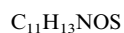
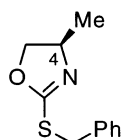
$[\alpha]_D = +180$ ($c 1$, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 5*R*

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Tetrahedron: Asymmetry 12 (2001) 337



(4*R*)-2-Benzylthio-4-methyl- Δ^2 -1,3-oxazoline

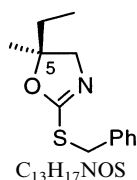
$[\alpha]_D = +8$ ($c 0.4$, $CHCl_3$)

Source of chirality: natural

Absolute configuration: 4*R*

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Tetrahedron: Asymmetry 12 (2001) 337

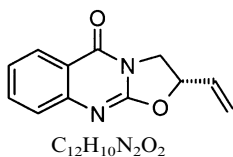


(5*S*)-2-Benzylthio-5-ethyl-5-methyl- Δ^2 -1,3-oxazoline

$[\alpha]_D = -9$ (*c* 2.9, $CHCl_3$)
Source of chirality: natural
Absolute configuration: 5*S*

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Tetrahedron: Asymmetry 12 (2001) 337

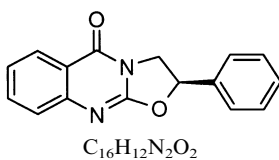


(2*S*)-2-Vinyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

$[\alpha]_D = -60$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural
Absolute configuration: 2*S*

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Tetrahedron: Asymmetry 12 (2001) 337

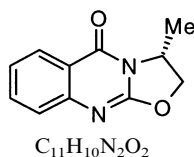


(2*R*)-2-Phenyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

$[\alpha]_D = +79$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural
Absolute configuration: 2*R*

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Tetrahedron: Asymmetry 12 (2001) 337

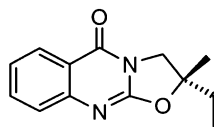


(3*R*)-3-Methyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

$[\alpha]_D = -105$ (*c* 1.0, $CHCl_3$)
Source of chirality: natural
Absolute configuration: 3*R*

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Tetrahedron: Asymmetry 12 (2001) 337



C₁₃H₁₄N₂O₂

(2*S*)-2-Ethyl-2-methyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

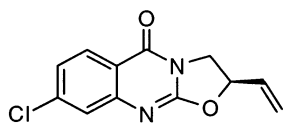
[α]_D = -15 (*c* 1.0, CHCl₃)

Source of chirality: natural

Absolute configuration: 2*S*

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Tetrahedron: Asymmetry 12 (2001) 337



C₁₂H₉ClN₂O₂

(2*R*)-8-Chloro-2-vinyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

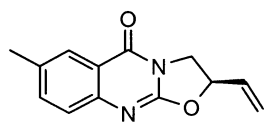
[α]_D = +48 (*c* 1.0, CHCl₃)

Source of chirality: natural

Absolute configuration: 2*R*

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Tetrahedron: Asymmetry 12 (2001) 337



C₁₃H₁₂N₂O₂

(2*R*)-7-Methyl-2-vinyl-2,3-dihydro-5*H*-[1,3]oxazolo[2,3-*b*]quinazolin-5-one

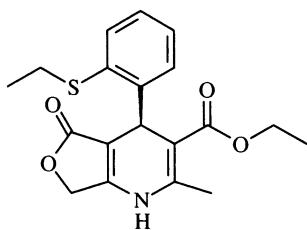
[α]_D = +64 (*c* 1.0, CHCl₃)

Source of chirality: natural

Absolute configuration: 2*R*

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Tetrahedron: Asymmetry 12 (2001) 341



C₁₉H₂₁NO₄S

Ethyl (*S*)-2-methyl-4-(2-ethylsulfanyl-phenyl)-5-oxo-1,4,5,7-tetrahydrofuro[3,4-*b*]pyridine-3-carboxylate

E_e = 99%

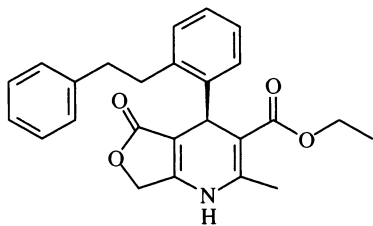
[α]_D²⁰ = -73.1 (*c* = 0.75, DMSO)

Source of chirality: resolution by chiral HPLC

Absolute configuration: *S*

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Tetrahedron: Asymmetry 12 (2001) 341



$C_{25}H_{25}NO_4$

Ethyl (*S*)-2-methyl-4-[2-(2-phenylethyl)phenyl]-5-oxo-1,4,5,7-tetrahydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 99%

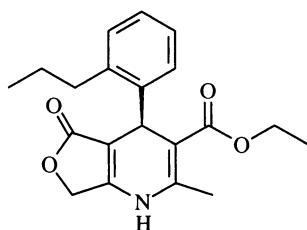
$[\alpha]_D^{20} = -72.5$ ($c = 0.91$, MeOH)

Source of chirality: resolution by chiral HPLC

Absolute configuration: *S*

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Tetrahedron: Asymmetry 12 (2001) 341



$C_{20}H_{23}NO_4$

Ethyl (*S*)-2-methyl-4-(2-propylphenyl)-5-oxo-1,4,5,7-tetrahydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 99%

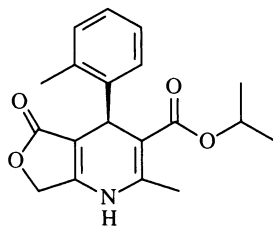
$[\alpha]_D^{20} = -131.9$ ($c = 0.91$, DMSO)

Source of chirality: resolution by chiral HPLC

Absolute configuration: *S*

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Tetrahedron: Asymmetry 12 (2001) 341



$C_{19}H_{21}NO_4$

Propyl (*R*)-2-methyl-4-(2-methylphenyl)-5-oxo-1,4,5,7-tetrahydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 99%

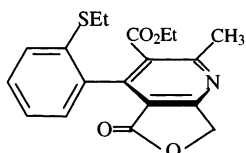
$[\alpha]_D^{20} = -133.9$ ($c = 0.75$, MeOH)

Source of chirality: resolution by chiral HPLC

Absolute configuration: *R*

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Tetrahedron: Asymmetry 12 (2001) 341



$C_{19}H_{19}NO_4S$

Ethyl (*S*)-4-(2-ethylsulfanyl-phenyl)-2-methyl-5-oxo-5,7-dihydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 93%

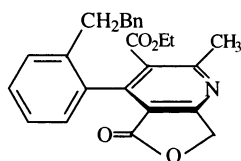
$[\alpha]_D^{20} = +118.6$ ($c = 1.2$, MeOH)

Source of chirality: chirality transfer

Absolute configuration: *S*

Bernd Koop, Alexander Straub and Hans J. Schäfer*

Tetrahedron: Asymmetry 12 (2001) 341



$C_{25}H_{23}NO_4$

Ethyl (*S*)-2-methyl-5-oxo-4-[2-(2-phenylethyl)phenyl]-5,7-dihydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 96%

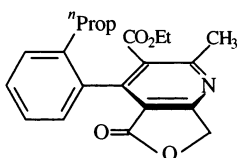
$[\alpha]_D^{20} = +17.8$ ($c = 1.0$, MeOH)

Source of chirality: chirality transfer

Absolute configuration: *S*

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Tetrahedron: Asymmetry 12 (2001) 341



$C_{20}H_{21}NO_4$

Ethyl (*S*)-2-methyl-5-oxo-4-(2-propylphenyl)-5,7-dihydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 93%

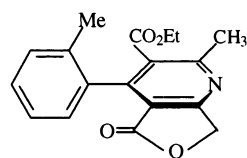
$[\alpha]_D^{20} = +63.4$ ($c = 0.9$, MeOH)

Source of chirality: chirality transfer

Absolute configuration: *S*

Bernd Koop, Alexander Straub and Hans J. Schäfer*

Tetrahedron: Asymmetry 12 (2001) 341



$C_{19}H_{19}NO_4$

Propyl (*R*)-2-methyl-5-oxo-4-(2-methylphenyl)-5,7-dihydrofuro[3,4-*b*]pyridine-3-carboxylate

Ee = 97%

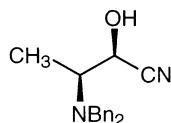
$[\alpha]_D^{20} = +99.3$ ($c = 1.1$, MeOH)

Source of chirality: chirality transfer

Absolute configuration: *R*

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



$C_{18}H_{20}N_2O$

(*2R,3S*)-3-(*N,N*-Dibenzylamino)-2-hydroxybutanenitrile

E.e. = 100%

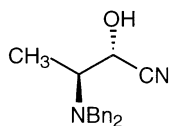
$[\alpha]_D^{23} = +90.3$ ($c = 1.1$, $CHCl_3$)

Source of chirality: L-alanine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



C₁₈H₂₀N₂O

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxybutanenitrile

E.e. = 100%

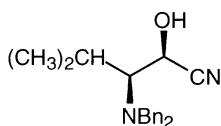
[α]_D²³ = +24.7 (*c* = 0.9, CHCl₃)

Source of chirality: L-alanine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



C₂₀H₂₄N₂O

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-methylpentanenitrile

E.e. = 100%

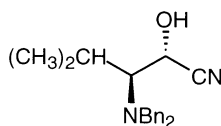
[α]_D²³ = +15.8 (*c* = 1.2, CHCl₃)

Source of chirality: L-valine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



C₂₀H₂₄N₂O

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-methylpentanenitrile

E.e. = 100%

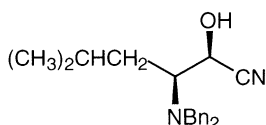
[α]_D²³ = -49.5 (*c* = 1.0, CHCl₃)

Source of chirality: L-valine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



C₂₁H₂₆N₂O

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-5-methylhexanenitrile

E.e. = 100%

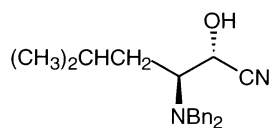
[α]_D²³ = +45.5 (*c* = 1.1, CHCl₃)

Source of chirality: L-leucine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

Tetrahedron: Asymmetry 12 (2001) 347



C₂₁H₂₆N₂O

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-5-methylhexanenitrile

E.e. = 100%

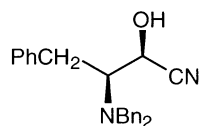
[α]_D²³ = +23.3 (*c* = 1.0, CHCl₃)

Source of chirality: L-leucine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

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C₂₄H₂₄N₂O

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-phenylbutanenitrile

E.e. = 100%

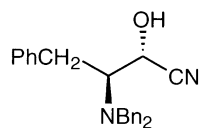
[α]_D²³ = +46.8 (*c* = 1.0, CHCl₃)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

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C₂₄H₂₄N₂O

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-phenylbutanenitrile

E.e. = 100%

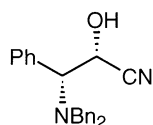
[α]_D²³ = +48.0 (*c* = 1.0, CHCl₃)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

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C₂₃H₂₂N₂O

(2*S*,3*R*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-3-phenylpropanenitrile

E.e. = 100%

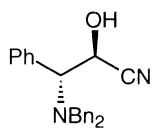
[α]_D²³ = -139.7 (*c* = 1.0, CHCl₃)

Source of chirality: D-2-phenylglycine and asymmetric synthesis

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

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$C_{23}H_{22}N_2O$

(2*R*,3*R*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-3-phenylpropanenitrile

E.e. = 100%

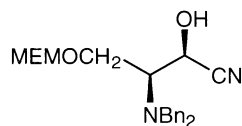
$[\alpha]_D^{23} = -81.6$ ($c = 1.1$, $CHCl_3$)

Source of chirality: D-2-phenylglycine and asymmetric synthesis

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

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$C_{22}H_{28}N_2O_4$

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-[(2-methoxyethoxy)methoxy]butanenitrile

E.e. = 100%

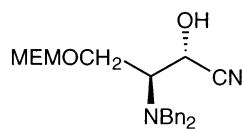
$[\alpha]_D^{23} = +9.8$ ($c = 1.2$, $CHCl_3$)

Source of chirality: L-serine and asymmetric synthesis

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

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$C_{22}H_{28}N_2O_4$

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-[(2-methoxyethoxy)methoxy]butanenitrile

E.e. = 100%

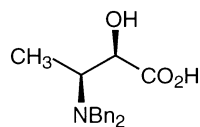
$[\alpha]_D^{23} = +24.2$ ($c = 0.6$, $CHCl_3$)

Source of chirality: L-serine and asymmetric synthesis

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

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$C_{18}H_{21}NO_3$

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxybutanoic acid

E.e. = 100%

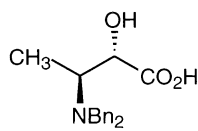
$[\alpha]_D^{23} = +66.0$ ($c = 1.1$, $CHCl_3$)

Source of chirality: L-alanine and asymmetric synthesis

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

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$C_{18}H_{21}NO_3$

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxybutanoic acid

E.e. = 100%

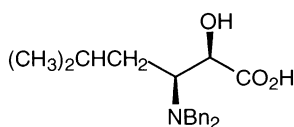
$[\alpha]_D^{23} = +40.2$ ($c = 1.0$, $CHCl_3$)

Source of chirality: L-alanine and asymmetric synthesis

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

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$C_{21}H_{27}NO_3$

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-5-methylhexanoic acid

E.e. = 100%

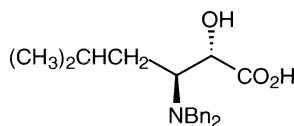
$[\alpha]_D^{23} = +60.3$ ($c = 1.1$, $CHCl_3$)

Source of chirality: L-leucine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

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$C_{21}H_{27}NO_3$

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-5-methylhexanoic acid

E.e. = 100%

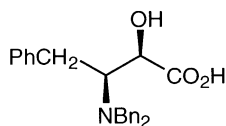
$[\alpha]_D^{23} = +33.8$ ($c = 0.9$, $CHCl_3$)

Source of chirality: L-leucine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

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$C_{24}H_{25}NO_3$

(2*R*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-phenylbutanoic acid

E.e. = 100%

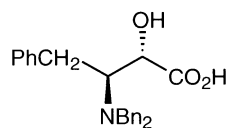
$[\alpha]_D^{23} = +33.4$ ($c = 1.0$, $CHCl_3$)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

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$C_{24}H_{25}NO_3$

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-4-phenylbutanoic acid

E.e. = 100%

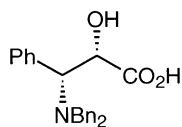
$[\alpha]_D^{23} = +49.9$ ($c = 1.1$, $CHCl_3$)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

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$C_{23}H_{23}NO_3$

(2*S*,3*S*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-3-phenylpropanoic acid

E.e. = 100%

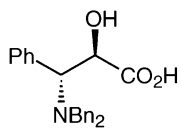
$[\alpha]_D^{23} = -83.0$ ($c = 1.0$, $CHCl_3$)

Source of chirality: D-2-phenylglycine and asymmetric synthesis

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

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$C_{23}H_{23}NO_3$

(2*R*,3*R*)-3-(*N,N*-Dibenzylamino)-2-hydroxy-3-phenylpropanoic acid

E.e. = 100%

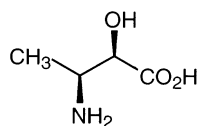
$[\alpha]_D^{23} = -77.0$ ($c = 1.1$, $CHCl_3$)

Source of chirality: D-2-phenylglycine and asymmetric synthesis

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

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$C_4H_9NO_3$

(2*R*,3*S*)-3-Amino-2-hydroxybutanoic acid

E.e. = 100%

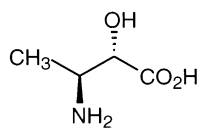
$[\alpha]_D^{23} = +21.6$ ($c = 1.1$, H_2O)

Source of chirality: L-alanine and asymmetric synthesis

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

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(2*S*,3*S*)-3-Amino-2-hydroxybutanoic acid

E.e. = 100%

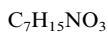
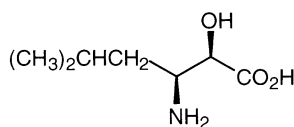
$[\alpha]_D^{23} = -25.7$ ($c = 1.1$, H_2O)

Source of chirality: L-alanine and asymmetric synthesis

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

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(2*R*,3*S*)-3-Amino-2-hydroxy-5-methylhexanoic acid

E.e. = 100%

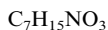
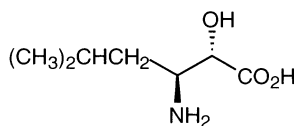
$[\alpha]_D^{23} = +28.7$ ($c = 0.3$, AcOH)

Source of chirality: L-leucine and asymmetric synthesis

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

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(2*S*,3*S*)-3-Amino-2-hydroxy-5-methylhexanoic acid

E.e. = 100%

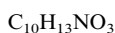
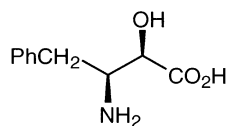
$[\alpha]_D^{23} = -16.0$ ($c = 0.4$, AcOH)

Source of chirality: L-leucine and asymmetric synthesis

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

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Tetrahedron: Asymmetry 12 (2001) 347



(2*R*,3*S*)-3-Amino-2-hydroxy-4-phenylbutanoic acid

E.e. = 100%

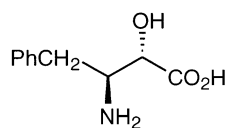
$[\alpha]_D^{23} = -27.0$ ($c = 1.1$, 1*N* HCl)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

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$C_{10}H_{13}NO_3$

(2*S*,3*S*)-3-Amino-2-hydroxy-4-phenylbutanoic acid

E.e. = 100%

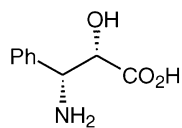
$[\alpha]_D^{23} = -5.1$ ($c = 0.9$, 1N HCl)

Source of chirality: L-phenylalanine and asymmetric synthesis

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

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$C_9H_{11}NO_3$

(2*S*,3*R*)-3-Amino-2-hydroxy-3-phenylpropanoic acid

E.e. = 100%

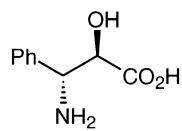
$[\alpha]_D^{23} = +14.4$ ($c = 0.5$, 6N HCl)

Source of chirality: D-phenylglycine and asymmetric synthesis

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

José M. Andrés, María A. Martínez, Rafael Pedrosa* and Alfonso Pérez-Encabo

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$C_9H_{11}NO_3$

(2*R*,3*R*)-3-Amino-2-hydroxy-3-phenylpropanoic acid

E.e. = 100%

$[\alpha]_D^{23} = +3.6$ ($c = 0.5$, 6N HCl)

Source of chirality: D-phenylglycine and asymmetric synthesis

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