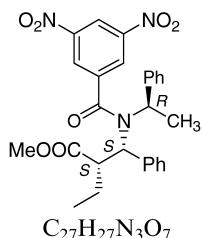


Stereochemistry abstracts

Mariappan Periasamy,* Surisetti Suresh and Subramaniapillai Selva Ganesan

Tetrahedron: Asymmetry 17 (2006) 1323



(*2S,3S,αR*)-Methyl 3-(*N*-(3,5-dinitrobenzoyl)-*N*- α -methylbenzyl)amino-3-phenyl-2-ethylpropionate

De >98%

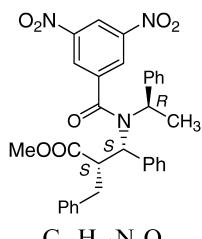
$[\alpha]_D^{25} = +66.4$ (*c* 1, CHCl₃)

Source of chirality: diastereoselective synthesis

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

Mariappan Periasamy,* Surisetti Suresh and Subramaniapillai Selva Ganesan

Tetrahedron: Asymmetry 17 (2006) 1323



(*2S,3S,αR*)-Methyl 3-(*N*-(3,5-dinitrobenzoyl)-*N*- α -methylbenzyl)amino-3-phenyl-2-benzylpropionate

De >96%

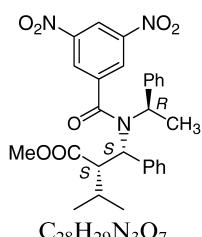
$[\alpha]_D^{25} = +64.3$ (*c* 1, CHCl₃)

Source of chirality: diastereoselective synthesis

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

Mariappan Periasamy,* Surisetti Suresh and Subramaniapillai Selva Ganesan

Tetrahedron: Asymmetry 17 (2006) 1323



(*2S,3S,αR*)-Methyl 3-(*N*-(3,5-dinitrobenzoyl)-*N*- α -methylbenzyl)amino-3-phenyl-2-isopropylpropionate

De >94%

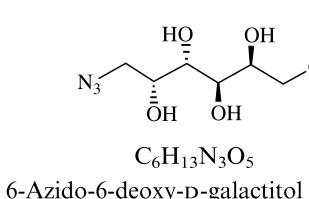
$[\alpha]_D^{25} = +47.1$ (*c* 1, CHCl₃)

Source of chirality: diastereoselective synthesis

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

Ludovic Chaveriat, Imane Stasik,* Gilles Demaily and Daniel Beaupère

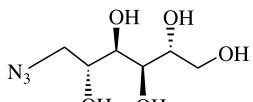
Tetrahedron: Asymmetry 17 (2006) 1349



Ee = 100%

$[\alpha]_D^{24} = -15.4$ (*c* 0.5, DMSO)

Source of chirality: D-galactono-1,4-lactone

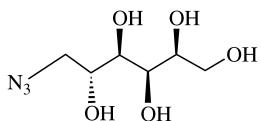


6-Azido-6-deoxy-D-mannitol

Ee = 100%

$[\alpha]_D^{24} = +27$ (*c* 1.0, H₂O)

Source of chirality: D-mannono-1,4-lactone

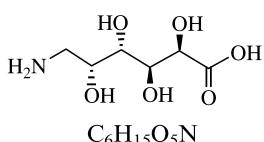


6-Azido-6-deoxy-D-glucitol

Ee = 100%

$[\alpha]_D^{24} = +12.2$ (*c* 0.5, H₂O)

Source of chirality: D-glucose

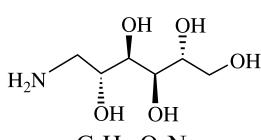


6-Amino-6-deoxy-D-galactitol

Ee = 100%

$[\alpha]_D^{24} = +22$ (*c* 0.8, H₂O)

Source of chirality: D-galactono-1,4-lactone

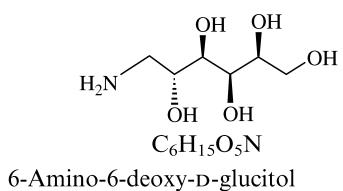


6-Amino-6-deoxy-D-mannitol

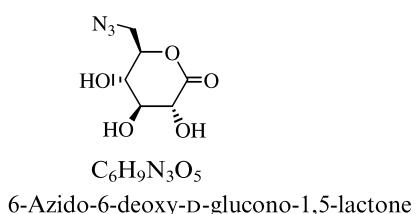
Ee = 100%

$[\alpha]_D^{24} = +28.4$ (*c* 1.0, H₂O)

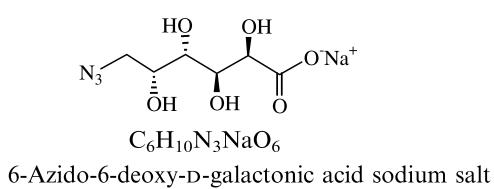
Source of chirality: D-mannono-1,4-lactone



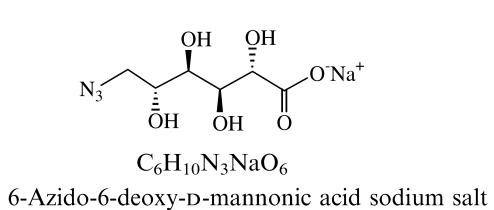
Ee = 100%
 $[\alpha]_D^{24} = +4.2$ (*c* 1.0, H₂O)
 Source of chirality: D-glucose



Ee = 100%
 $[\alpha]_D^{24} = +79$ (*c* 0.5, MeOH)
 Source of chirality: D-glucono-1,5-lactone



Ee = 100%
 $[\alpha]_D^{24} = +64.7$ (*c* 0.4, H₂O)
 Source of chirality: D-galactono-1,4-lactone

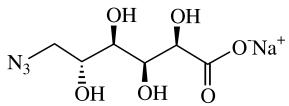


Ee = 100%
 $[\alpha]_D^{24} = +5.1$ (*c* 0.6, H₂O)
 Source of chirality: D-mannono-1,4-lactone

Ee = 100%

$[\alpha]_D^{24} = +7.0$ (*c* 0.3, H₂O)

Source of chirality: D-glucose

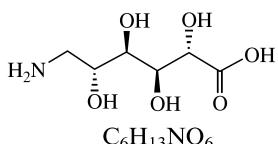


6-Azido-6-deoxy-D-gluconic acid sodium salt

Ee = 100%

$[\alpha]_D^{24} = +83.2$ (*c* 0.4, H₂O)

Source of chirality: D-galactono-1,4-lactone

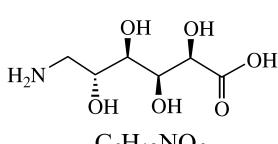


6-Amino-6-deoxy-D-galactonic acid

Ee = 100%

$[\alpha]_D^{24} = +4.3$ (*c* 0.6, H₂O)

Source of chirality: D-mannono-1,4-lactone

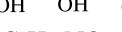
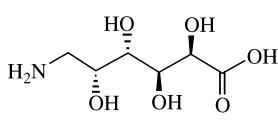


6-Amino-6-deoxy-D-mannonic acid

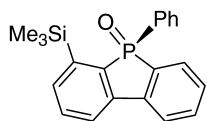
Ee = 100%

$[\alpha]_D^{24} = +18.7$ (*c* 0.5, H₂O)

Source of chirality: D-glucose



6-Amino-6-deoxy-D-gluconic acid

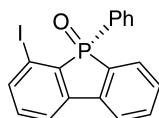


$C_{21}H_{21}OPSi$
(+)-(R)-4-Trimethylsilyl-5-phenyl-5*H*-dibenzophosphol oxide

$[\alpha]_D^{20} = +281$ (*c* 1.21, CHCl₃)

Source of chirality: enantioselective chromatography
(Chiralcel OD[®])

Absolute configuration: (R)_P

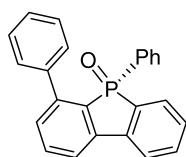


$C_{18}H_{12}IOP$
(-)-(S)-4-Iodo-5-phenyl-5*H*-dibenzophosphol oxide

$[\alpha]_D^{20} = -77.2$ (*c* 1.03, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

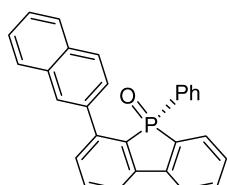


$C_{24}H_{17}OP$
(-)-(S)-4,5-Diphenyl-4*H*-dibenzophosphol oxide

$[\alpha]_D^{20} = -199$ (*c* 1.03, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

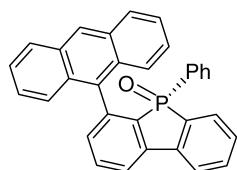


$C_{28}H_{19}OP$
(-)-(S)-4-(2-Naphthyl)-5-phenyl-4*H*-dibenzophosphol oxide

$[\alpha]_D^{20} = -357$ (*c* 1.01, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

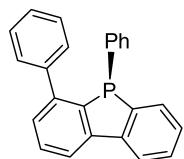


$C_{32}H_{21}OP$
(+)-(S)-4-(9-Anthryl)-5-phenyl-4*H*-dibenzophosphol oxide

$[\alpha]_D^{20} = +45$ (*c* 0.43, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

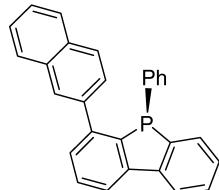


$C_{24}H_{17}P$
(-)-(S)-4,5-Diphenyl-4*H*-dibenzophosphol

$[\alpha]_D^{20} = -164$ (*c* 1.00, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

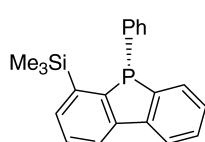


$C_{28}H_{19}P$
(-)-(S)-4-(2-Naphthyl)-5-phenyl-4*H*-dibenzophosphol

$[\alpha]_D^{20} = -162$ (*c* 1.00, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P

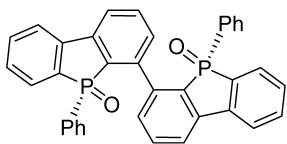


$C_{21}H_{21}PSi$
(+)-(R)-4-Trimethylsilyl-5-phenyl-5*H*-dibenzophosphol

$[\alpha]_D^{20} = +291$ (*c* 0.740, CHCl₃)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (R)_P

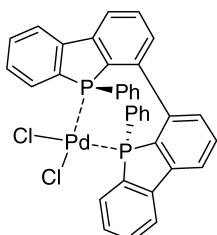


$C_{36}H_{24}O_2P_2$
(+)-(S,S)-5,5'-Diphenyl-4,4'-bis(5H-dibenzophosphol oxide)

$[\alpha]_D^{20} = +213$ (*c* 0.736, CH_2Cl_2)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P(S)_P

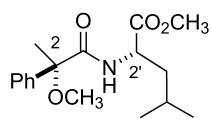


$C_{36}H_{24}Cl_2P_2Pd$
(-)-(S,S)-5,5'-Diphenyl-4,4'-bis(5H-dibenzophosphol)palladium dichloride complex

$[\alpha]_D^{20} = -373$ (*c* 0.105, CH_2Cl_2)

Source of chirality: enantioselective chromatography
of a precursor (Chiralcel OD[®])

Absolute configuration: (S)_P(S)_P



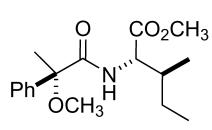
$C_{17}H_{25}NO_4$
(S)-2-((S)-2-Methoxy-2-phenyl-propionylamino)-4-methyl-pentanoic acid methyl ester

De = 100%

$[\alpha]_D^{20} = +12.7$ (*c* 0.88, CH_2Cl_2)

Source of chirality: natural compounds

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



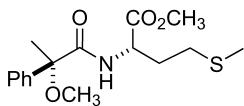
$C_{17}H_{25}NO_4$
(2*S*,3*S*)-2-((S)-2-Methoxy-2-phenyl-propionylamino)-3-methyl-pentanoic acid methyl ester

De = 100%

$[\alpha]_D^{20} = +35.8$ (*c* 0.30, CH_2Cl_2)

Source of chirality: natural compounds

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

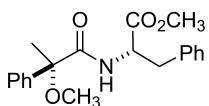
 $C_{16}H_{23}NO_4S$

(S)-2-((S)-2-Methoxy-2-phenyl-propionylamino)-4-methylsulfanyl-butrylic acid methyl ester

 $D_e = 100\%$ $[\alpha]_D^{20} = +36.4 (c \ 0.84, \text{CH}_2\text{Cl}_2)$

Source of chirality: natural compounds

Absolute configuration: (2S,2'S)

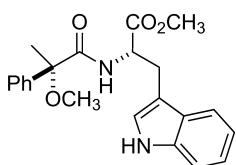
 $C_{20}H_{23}NO_4$

(S)-2-((S)-2-Methoxy-2-phenyl-propionylamino)-3-phenyl-propionic acid methyl ester

 $D_e = 100\%$ $[\alpha]_D^{20} = +98.7 (c \ 1.14, \text{CH}_2\text{Cl}_2)$

Source of chirality: natural compounds

Absolute configuration: (2S,2'S)

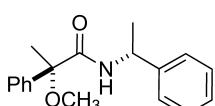
 $C_{22}H_{24}N_2O_4$

(S)-3-(1H-Indol-3-yl)-2-((S)-2-Methoxy-2-phenyl-propionylamino)-propionic acid methyl ester

 $D_e = 100\%$ $[\alpha]_D^{20} = +75.6 (c \ 0.24, \text{CH}_2\text{Cl}_2)$

Source of chirality: natural compounds

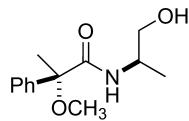
Absolute configuration: (2S,2'S)

 $C_{18}H_{21}NO_2$

(S)-2-Methoxy-2-phenyl-N-((R)-1-phenyl-ethyl)-propionamide

 $D_e = 100\%$ $[\alpha]_D^{20} = +130.3 (c \ 0.26, \text{CH}_2\text{Cl}_2)$

Absolute configuration: (2S,2'R)

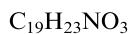
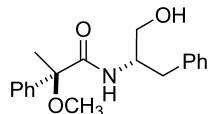


(R)-2-Aminopropanol-(R)-O-methylatrolactic acid amide

De = 100%

 $[\alpha]_D^{20} = -39.7$ (*c* 1.36, CH₂Cl₂)

Source of chirality: natural compounds

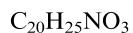
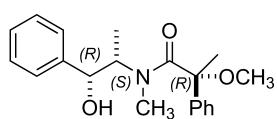
Absolute configuration: (2*R*,2*R*)

(S)-Phenylalanin-2-ol-(R)-O-methylatrolactic acid amide

De = 100%

 $[\alpha]_D^{20} = -43.0$ (*c* 0.64, CH₂Cl₂)

Source of chirality: natural compounds

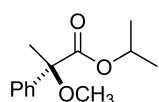
Absolute configuration: (2*R*,2*S*)

(-)-Ephedrine-(R)-O-methylatrolactic acid amide

De = 100%

 $[\alpha]_D^{20} = +3.4$ (*c* 0.76, CH₂Cl₂)

Source of chirality: natural compounds

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

(R)-Propan-2-ol-O-methylatrolactate

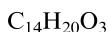
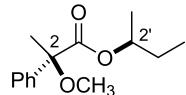
Ee >98%

 $[\alpha]_D^{20} = +24.4$ (*c* 0.31, CH₂Cl₂)Source of chirality: *O*-methylatrolactic acid

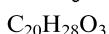
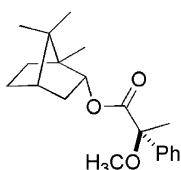
Absolute configuration: (R)

$D_e = 100\%$ $[\alpha]_D^{20} = +40.4 (c \ 0.76, \text{CH}_2\text{Cl}_2)$

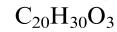
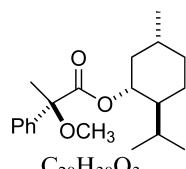
Source of chirality: natural compounds

Absolute configuration: (1*R*,2'*S*)(R,S)-*sec*-Butyl-*O*-methylatrolactate $D_e = 100\%$ $[\alpha]_D^{20} = -37.9 (c \ 0.83, \text{CH}_2\text{Cl}_2)$

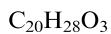
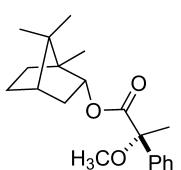
Source of chirality: natural compounds

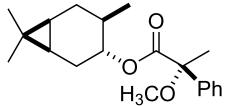
Absolute configuration: (2*S*,2'*S*)(−)-Bornyl-(S)-*O*-methylatrolactate $D_e = 100\%$ $[\alpha]_D^{20} = -49.5 (c \ 1.1, \text{CH}_2\text{Cl}_2)$

Source of chirality: natural compounds

Absolute configuration: (2*R*,1'R,2'S,3'R)(−)-Menthyl (*R*)-*O*-methylatrolactate $D_e = 100\%$ $[\alpha]_D^{20} = -11.1 (c \ 0.92, \text{CH}_2\text{Cl}_2)$

Source of chirality: natural compounds

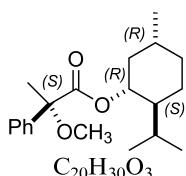
Absolute configuration: (2*R*,2'S)(−)-Bornyl (*R*)-*O*-methylatrolactate

 $C_{20}H_{28}O_3$ (-)-*cis*-Caran-*trans*-4-yl (*R*)-*O*-methylatrolactate

De = 100%

 $[\alpha]_D^{20} = -42.3$ (*c* 1.0, CH_2Cl_2)

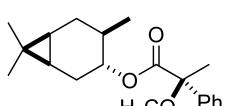
Source of chirality: natural compounds

Absolute configuration: (*2R,1'R,2'R,3'S,4'R*)(-)-Menthyl (*S*)-*O*-methylatrolactate

De = 100%

 $[\alpha]_D^{20} = -73.3$ (*c* 0.63, CH_2Cl_2)

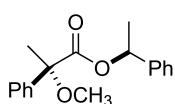
Source of chirality: natural compounds

Absolute configuration: (*2S,1'R,2'S,3'R*) $C_{20}H_{28}O_3$ (-)-*cis*-Caran-*trans*-4-yl (*S*)-*O*-methylatrolactate

De = 100%

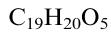
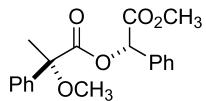
 $[\alpha]_D^{20} = -74.2$ (*c* 0.90, CH_2Cl_2)

Source of chirality: natural compounds

Absolute configuration: (*1S,1'R,2'R,4'S,5'R*) $C_{18}H_{20}O_3$ (S)-1-Phenylethyl-(S)-*O*-methylatrolactate

De = 100%

 $[\alpha]_D^{20} = -44.2$ (*c* 0.75, CH_2Cl_2)Absolute configuration: (*2S,2'S*)

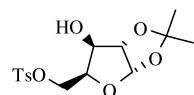


(S)-2-Methoxy-2-phenyl-propionic acid (S)-methoxycarbonyl-phenyl-methyl ester

$D_e = 100\%$

$[\alpha]_D^{20} = +61.3$ (*c* 1.05, CH₂Cl₂)

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

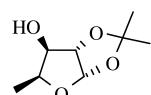


6-Hydroxy-2,2-dimethyl-5-(4-methylphenylsulfonyloxyethyl)-(3a*S*,5*S*,6*R*,6a*S*)-perhydrofuro[2,3-*d*][1,3]dioxole

$[\alpha]_D^{20} = +13.8$ (*c* 1.0, CH₃OH)

Source of chirality: L-xylose

Absolute configuration: (3a*S*,5*S*,6*R*,6a*S*)

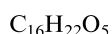
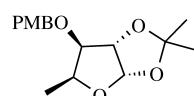


2,2,5-Trimethyl-(3a*S*,5*S*,6*R*,6a*S*)-perhydrofuro[2,3-*d*][1,3]dioxol-6-ol

$[\alpha]_D^{20} = +22.4$ (*c* 1.0, CH₃OH)

Source of chirality: L-xylose

Absolute configuration: (3a*S*,5*S*,6*R*,6a*S*)

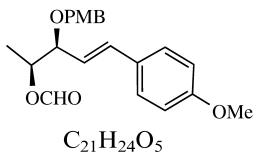


6-Hydroxy-2,2-dimethyl-5-(4-methylphenylsulfonyloxyethyl)-(3a*S*,5*S*,6*R*,6a*S*)-perhydrofuro[2,3-*d*][1,3]dioxole

$[\alpha]_D^{20} = +20.3$ (*c* 1, CH₃OH)

Source of chirality: L-xylose

Absolute configuration: (3a*S*,5*S*,6*R*,6a*S*)

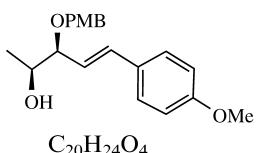


2-(4-Methoxybenzyloxy)-4-(4-methoxyphenyl)-1-methyl-(1*S*,2*S*,3*E*)-3-butenyl formate

$[\alpha]_D^{20} = +17.7$ (*c* 1.0, CH₃OH)

Source of chirality: L-xylose

Absolute configuration: (1*S*,2*S*,3*E*)

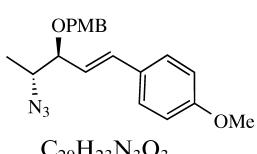


3-(4-Methoxybenzyloxy)-5-(4-methoxyphenyl)-(2*S*,3*S*,4*E*)-4-penten-2-ol

$[\alpha]_D^{20} = +74.7$ (*c* 1.1, CH₃OH)

Source of chirality: L-xylose

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

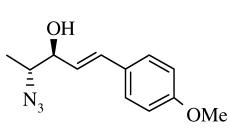


1-[4-Azido-3-(4-methoxybenzyloxy)-(E,3*S*,4*R*)-1-pentenyl]-4-methoxybenzene

$[\alpha]_D^{20} = +70.2$ (*c* 0.5, MeOH)

Source of chirality: L-xylose

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

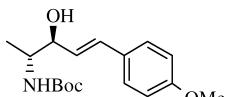


4-Azido-1-(4-methoxyphenyl)-(E,3*S*,4*R*)-1-penten-3-ol

$[\alpha]_D^{20} = +17.1$ (*c* 0.8, MeOH)

Source of chirality: L-xylose

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



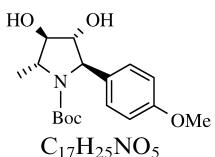
C₁₇H₂₅NO₄

2-[*tert*-Butoxycarbonylamino]-(*2R,3S,4E*)-5-(4-methoxyphenyl)-pent-4-en-3-ol

$[\alpha]_D^{20} = -12.6$ (*c* 0.5, MeOH)

Source of chirality: L-xylose or D-serine

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



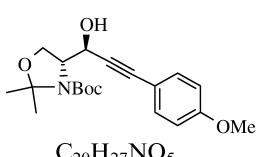
C₁₇H₂₅NO₅

tert-Butyl 3,4-dihydroxy-2-(4-methoxyphenyl)-5-methyl-(2*R*,3*R*,4*R*,5*R*)-tetrahydro-1*H*-1-pyrrolecarboxylate

$[\alpha]_D^{20} = -50.2$ (*c* 1, MeOH)

Source of chirality: L-xylose or D-serine

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



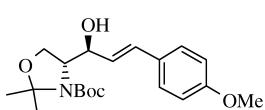
C₂₀H₂₇NO₅

tert-Butyl 4-[1-hydroxy-3-(4-methoxyphenyl)-(1*S*)-2-propynyl]-2,2-dimethyl-(4*R*)-1,3-oxazolane-3-carboxylate

$[\alpha]_D^{20} = +26.8$ (*c* 1.4, MeOH)

Source of chirality: D-serine

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



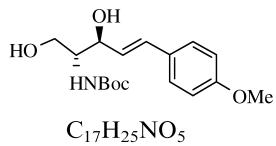
C₂₀H₂₉NO₅

tert-Butyl 4-[1-hydroxy-3-(4-methoxyphenyl)-(1*S*,2*E*)-2-propenyl]-2,2-dimethyl-(4*R*)-1,3-oxazolane-3-carboxylate

$[\alpha]_D^{20} = -15.1$ (*c* 1.9, MeOH)

Source of chirality: D-serine

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

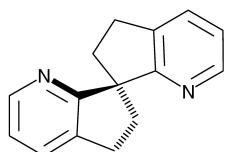


C₁₇H₂₅NO₅
2-[*tert*-Butylcarbonylamino]-(2*R*,3*S*,4*E*)-5-(4-methoxyphenyl)-pent-4-ene-1,3-diol

[α]_D²⁰ = -20.2 (*c* 1.4, CH₃OH)

Source of chirality: D-serine

Absolute configuration: (3a*S*,5*S*,6*R*,6a*S*)

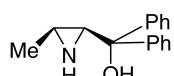


C₁₅H₁₄N₂
5,5',6,6'-Tetrahydro-7,7'-spiro[7*H*-cyclopenta[*b*]pyridine]

[α]_D = +4.2 (*c* 0.46, EtOH)

Source of chirality: chromatographic resolution upon Chiralcel AD

Absolute configuration: (a*S*)

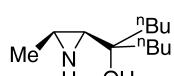


C₁₆H₁₇NO
(2*S*,3*S*)-3-Methylaziridin-2-yl(diphenyl)methanol

[α]_D²⁰ = +80.0 (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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



C₁₂H₂₅NO
(2*S*,3*S*)-3-Methylaziridin-2-yl(dibutyl)methanol

[α]_D²⁰ = -10.5 (*c* 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

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

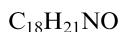
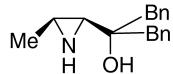
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Wu Lamei and Hu Xianming*

Tetrahedron: Asymmetry 17 (2006) 1394

$$[\alpha]_D^{20} = -23.2 \text{ (c } 0.5, \text{ CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)



(2S,3S)-3-Methylaziridin-2-yl(dibenzyl)methanol

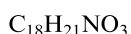
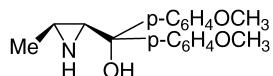
Feng Xichun,* Qiu Guofu, Liang Shucui, Teng Hanbing,
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Tetrahedron: Asymmetry 17 (2006) 1394

$$[\alpha]_D^{20} = +58.7 \text{ (c } 0.5, \text{ CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)



(2S,3S)-3-Methylaziridin-2-yl(bis(4-methoxyphenyl))methanol

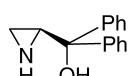
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$$[\alpha]_D^{20} = -22.6 \text{ (c } 1.0, \text{ CHCl}_3\text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (2S)



(2S)-Aziridin-2-yl(diphenyl)methanol

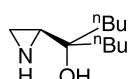
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Tetrahedron: Asymmetry 17 (2006) 1394

$$[\alpha]_D^{20} = -21.4 \text{ (c } 10.0, \text{ THF}\text{)}$$

Source of chirality: asymmetric synthesis

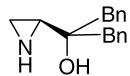
Absolute configuration: (2S)



(2S)-Aziridin-2-yl(dibutyl)methanol

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C₁₇H₁₉NO
(2S)-Aziridin-2-yl(dibenzyl)methanol

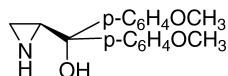
[α]_D²⁰ = -28.4 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S)

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C₁₇H₁₉NO₃
(2S)-Aziridin-2-yl(bis(4-methoxyphenyl))methanol

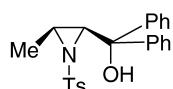
[α]_D²⁰ = +67.0 (c 9.0, THF)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S)

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C₂₃H₂₃NO₃S
(2S,3S)-(3-Methyl-1-tosylaziridin-2-yl)diphenylmethanol

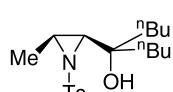
[α]_D²⁰ = +22.1 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)

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C₁₉H₃₁NO₃S
(2S,3S)-(3-Methyl-1-tosylaziridin-2-yl)tributylmethanol

[α]_D²⁰ = -5.2 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)

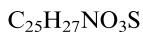
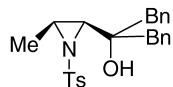
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Tetrahedron: Asymmetry 17 (2006) 1394

$[\alpha]_D^{20} = -58.5$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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



(2*S*,3*S*)-(3-Methyl-1-tosylaziridin-2-yl)dibenzylmethanol

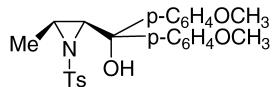
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$[\alpha]_D^{20} = +32.3$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

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



(2*S*,3*S*)-(3-Methyl-1-tosylaziridin-2-yl)bis(4-methoxyphenyl)methanol

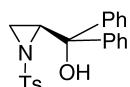
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Tetrahedron: Asymmetry 17 (2006) 1394

$[\alpha]_D^{20} = -35.3$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)



(*S*)-(1-Tosylaziridin-2-yl)diphenylmethanol

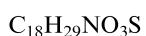
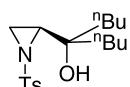
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Wu Lamei and Hu Xianming*

Tetrahedron: Asymmetry 17 (2006) 1394

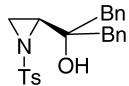
$[\alpha]_D^{20} = -24.1$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)



(*S*)-(1-Tosylaziridin-2-yl)dibutylmethanol

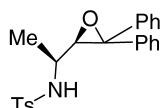


C₂₄H₂₅NO₃S
(S)-(1-Tosylaziridin-2-yl)dibenzylmethanol

$[\alpha]_D^{20} = -47.4$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

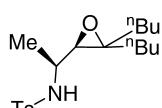


C₂₃H₂₃NO₃S
(2R,3S)-N-(1-(3,3-Diphenyloxiran-2-yl)ethyl)-4-methylbenzenesulfonamide

$[\alpha]_D^{20} = +130.7$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2R,3S)

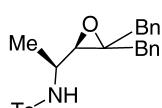


C₁₉H₃₁NO₃S
(2R,3S)-N-(1-(3,3-Dibutyloxiran-2-yl)ethyl)-4-methylbenzenesulfonamide

$[\alpha]_D^{20} = +36.2$ (*c* 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2R,3S)



C₂₅H₂₇NO₃S
(2R,3S)-N-(1-(3,3-Dibenzylloxiran-2-yl)ethyl)-4-methylbenzenesulfonamide

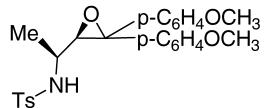
$[\alpha]_D^{20} = -28.9$ (*c* 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2R,3S)

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Wu Lamei and Hu Xianming*

Tetrahedron: Asymmetry 17 (2006) 1394



C₂₅H₂₇NO₅S
(2R,3S)-N-(1-(3,3-Bis(4-methoxyphenyl)oxiran-2-yl)ethyl)-4-methylbenzenesulfonamide

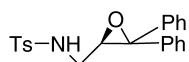
[α]_D²⁰ = -26.2 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2R,3S)

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Tetrahedron: Asymmetry 17 (2006) 1394



C₂₂H₂₁NO₃S
(2R)-N-((3,3-Diphenyloxiran-2-yl)methyl)-4-methylbenzenesulfonamide

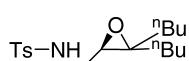
[α]_D²⁰ = +84.3 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)

Feng Xichun,* Qiu Guofu, Liang Shucui, Teng Hanbing,
Wu Lamei and Hu Xianming*

Tetrahedron: Asymmetry 17 (2006) 1394



C₁₈H₂₉NO₃S
(2R)-N-((3,3-Dibutyloxiran-2-yl)methyl)-4-methylbenzenesulfonamide

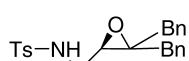
[α]_D²⁰ = +37.4 (c 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)

Feng Xichun,* Qiu Guofu, Liang Shucui, Teng Hanbing,
Wu Lamei and Hu Xianming*

Tetrahedron: Asymmetry 17 (2006) 1394

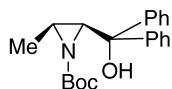


C₂₄H₂₅NO₃S
(2R)-N-((3,3-Dibenzylloxiran-2-yl)methyl)-4-methylbenzenesulfonamide

[α]_D²⁰ = +40.5 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)



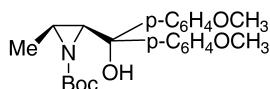
C₂₁H₂₅NO₃

(2S,3S)-*tert*-Butyl 2-(hydroxydiphenylmethyl)-3-methylaziridine-1-carboxylate

[α]_D²⁰ = -1.5 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)



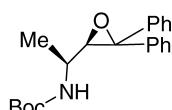
C₂₃H₂₉NO₅

(2S,3S)-*tert*-Butyl 2-(hydroxybis(4-methoxyphenyl))-3-methylaziridine-1-carboxylate

[α]_D²⁰ = -9.8 (c 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)



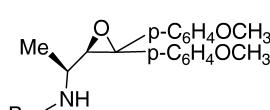
C₂₁H₂₅NO₃

(2R,3S)-*tert*-Butyl 1-(3,3-diphenyloxiran-2-yl)ethylcarbamate

[α]_D²⁰ = +78.0 (c 1.0, CHCl₃)

Source of chirality: asymmetrical synthesis

Absolute configuration: (2R,3S)



C₂₃H₂₉NO₅

(2R,3S)-*tert*-Butyl 1-(3,3-bis(4-methoxyphenyl)oxiran-2-yl)ethylcarbamate

[α]_D²⁰ = +20.0 (c 0.6, CHCl₃)

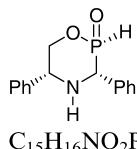
Source of chirality: asymmetrical synthesis

Absolute configuration: (2R,3S)

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402

$$[\alpha]_D^{20} = -19.0 \text{ } (c \text{ } 1.04, \text{CHCl}_3)$$

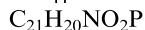
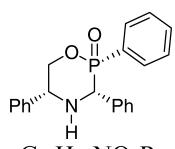


(2S,3R,5R)-(-)-3,5-Diphenyl-2-hydrogeno-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402

$$[\alpha]_D^{20} = +140.3 \text{ } (c \text{ } 0.52, \text{CHCl}_3)$$

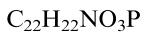
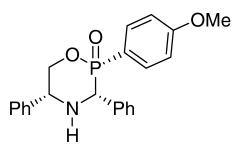


(2S,3R,5R)-(+)-2,3,5-Triphenyl-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402

$$[\alpha]_D^{20} = +145.6 \text{ } (c \text{ } 0.51, \text{CHCl}_3)$$

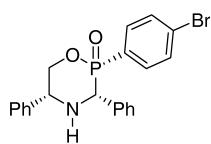


(2S,3R,5R)-(+)-2-p-Methoxyphenyl-3,5-diphenyl-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

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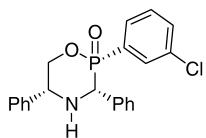
$$[\alpha]_D^{20} = +160.8 \text{ } (c \text{ } 0.51, \text{CHCl}_3)$$



(2S,3R,5R)-(+)-2-p-Bromophenyl-3,5-diphenyl-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

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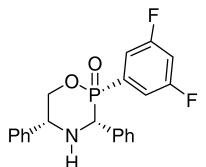


$[\alpha]_D^{20} = +152.7$ (*c* 0.55, CHCl₃)

C₂₁H₁₉ClNO₂P
(2*S*,3*R*,5*R*)-(+)-2-*m*-Chlorophenyl-3,5-diphenyl-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402

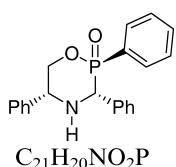


$[\alpha]_D^{20} = +122.2$ (*c* 0.54, CHCl₃)

C₂₁H₁₈F₂NO₂P
(2*S*,3*R*,5*R*)-(+)-2-(3,5-Difluorophenyl)-3,5-diphenyl-2-oxo-[1,4,2]-oxazaphosphinane

Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402

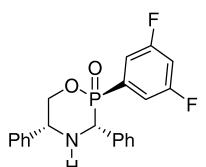


$[\alpha]_D^{20} = -91.7$ (*c* 0.48, CHCl₃)

C₂₁H₂₀NO₂P
(2*R*,3*R*,5*R*)-(-)-2,3,5-Triphenyl-2-oxo-[1,4,2]-oxazaphosphinane

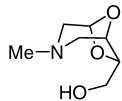
Jean-Noël Volle,* David Virieux, Matthieu Starck, Jérôme Monbrun,
Ludovic Clarion and Jean-Luc Pirat*

Tetrahedron: Asymmetry 17 (2006) 1402



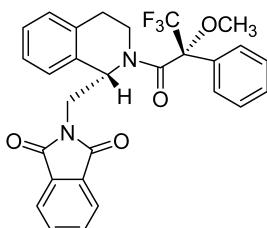
$[\alpha]_D^{20} = -80.0$ (*c* 0.50, acetone)

C₂₁H₁₈F₂NO₂P
(2*R*,3*R*,5*R*)-(-)-2-(3,5-Difluorophenyl)-3,5-diphenyl-2-oxo-[1,4,2]-oxazaphosphinane



C₇H₁₃NO₃
(1S,5S,7R)-(3-Methyl-6,8-dioxa-3-aza-bicyclo[3.2.1]oct-7-yl)-methanol

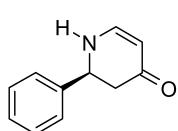
Ee = 100%

[α]_D²² = -91.2 (*c* 0.89, CHCl₃)Source of chirality: (-)-2,3-*O*-isopropylidene-D-erythronolactoneAbsolute configuration: (1*S*,5*S*,7*R*)

C₂₈H₂₃N₂O₄F₃
(1*S*)-1-Phthalimidomethyl-2-[(2'*R*)-3',3',3'-trifluoro-2'-methoxy-2'-phenylpropanoyl]-1,2,3,4-tetrahydroisoquinoline

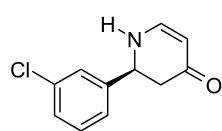
[α]_D²³ = +35.0 (*c* 1.00, CHCl₃)

Source of chirality: asymmetric transfer hydrogenation

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

C₁₁H₁₁NO
(2*S*)-2,3-Dihydro-2-phenyl-4-(1*H*)-pyridinone

Ee = 60%

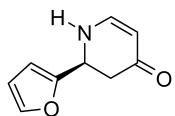
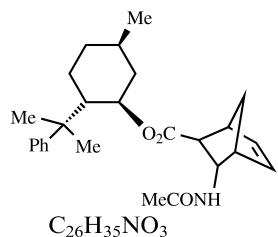
[α]_D = +195.3 (*c* 2.51, EtOH)

C₁₁H₁₀ClNO
(2*S*)-2-(3-Chlorophenyl)-2,3-dihydro-4-(1*H*)-pyridinone

Ee = 68%

[α]_D = +104.9 (*c* 2.14, CHCl₃)

Ee = 69%

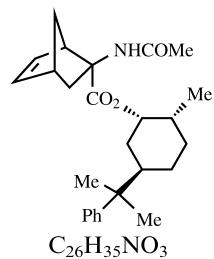
 $[\alpha]_D^{25} = +430.1$ (*c* 0.565, CHCl₃)C₉H₉NO(2*S*)-2,3-Dihydro-2-(2-furyl)-4-(1*H*)-pyridinoneFrancesco Caputo, Francesca Clerici, Maria Luisa Gelmi,*
Sara Pellegrino and Donato PocarC₂₆H₃₅NO₃

(-)-8-Phenylmenthyl 2-acetylaminobicyclo[2.2.1]hept-5-ene-2-carboxylate

mp 188–189 °C (acetone)

 $[\alpha]_D^{25} = -49.7$ (*c* 0.8, CHCl₃)

Source of chirality: asymmetric synthesis

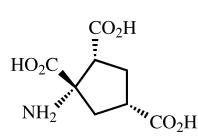
Absolute configuration: 1*S*,2*S*,4*S*Francesco Caputo, Francesca Clerici, Maria Luisa Gelmi,*
Sara Pellegrino and Donato PocarC₂₆H₃₅NO₃

(-)-8-Phenylmenthyl 2-acetylaminobicyclo[2.2.1]hept-5-ene-2-carboxylate

mp 230 °C (acetone)

 $[\alpha]_D^{25} = +79.6$ (*c* 0.6, CHCl₃)

Source of chirality: asymmetric synthesis

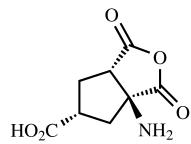
Absolute configuration: 1*R*,2*S*,4*R*Francesco Caputo, Francesca Clerici, Maria Luisa Gelmi,*
Sara Pellegrino and Donato PocarC₈H₁₁NO₆

1-Aminocyclopentane-1,2,4-tricarboxylic acid

 $[\alpha]_D^{25} = +3.1$ (*c* 0.26, H₂O)

Source of chirality: asymmetric synthesis

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

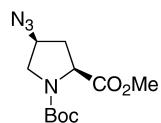


$C_8H_9NO_5$
3a-Amino-1,3-dioxo-hexahydro-cyclopenta[c]furan-5-carboxylic acid

$[\alpha]_D^{25} = +6.7$ (*c* 0.25, H₂O)

Source of chirality: asymmetric synthesis

Absolute configuration: 3a*S*,5*R*,6a*S*

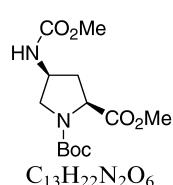


$C_{11}H_{18}N_4O_4$
1-*tert*-Butyl 2-methyl (2*S*,4*S*)-4-azido-1,2-pyrrolidinedicarboxylate

$[\alpha]_D^{23} = -40.3$ (*c* 1, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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

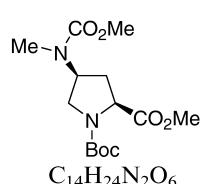


$C_{13}H_{22}N_2O_6$
1-*tert*-Butyl 2-methyl (2*S*,4*S*)-4-(*N*-methoxycarbonyl)aminopyrrolidine-1,2-dicarboxylate

$[\alpha]_D^{23} = -23.7$ (*c* 0.85, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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

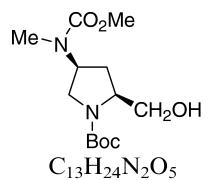


$C_{14}H_{24}N_2O_6$
tert-Butyl 2-methyl (2*S*,4*S*)-4-[(*N*-methoxycarbonyl)-*N*-methylamino]pyrrolidine-1,2-dicarboxylate

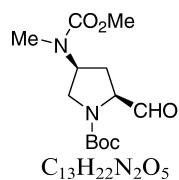
$[\alpha]_D^{23} = -44.7$ (*c* 1, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

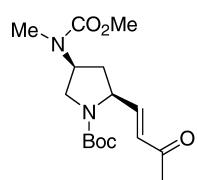
Absolute configuration: 2*S*,4*S*



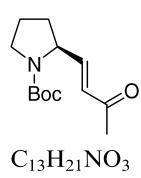
tert-Butyl (2S,4S)-2-(hydroxymethyl)-4-[(N-methoxycarbonyl)-N-methylamino]pyrrolidine-1-carboxylate

 $[\alpha]_D^{23} = -43.7$ (*c* 1, CHCl₃)Source of chirality: *trans*-4-hydroxy-L-prolineAbsolute configuration: 2*S*,4*S*

tert-Butyl (2S,4S)-2-formyl-4-[(N-methoxycarbonyl)-N-methylamino]pyrrolidine-1-carboxylate

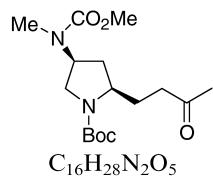
 $[\alpha]_D^{23} = -70.7$ (*c* 1, CHCl₃)Source of chirality: *trans*-4-hydroxy-L-prolineAbsolute configuration: 2*S*,4*S*

tert-Butyl (2S,4S)-2-[(1E)-3-oxobut-1-enyl]-4-[(N-methoxycarbonyl)-N-methylamino]pyrrolidine-1-carboxylate

 $[\alpha]_D^{23} = -31.8$ (*c* 1, CHCl₃)Source of chirality: *trans*-4-hydroxy-L-prolineAbsolute configuration: 2*S*,4*S*tert-Butyl (2*S*)-2-[(1*E*)-3-oxobut-1-enyl]pyrrolidine-1-carboxylate $[\alpha]_D^{23} = -86.9$ (*c* 1, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 2*S*

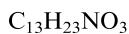
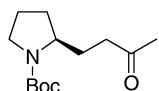


tert-Butyl (2*R*,4*S*)-2-(3-oxobutyl)-4-[(*N*-methoxycarbonyl)-*N*-methylamino]pyrrolidine-1-carboxylate

$[\alpha]_D^{23} = -47.3$ (*c* 1, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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

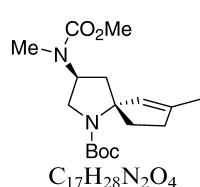


tert-Butyl (2*S*)-2-(3-oxobutyl)pyrrolidine-1-carboxylate

$[\alpha]_D^{23} = -51.8$ (*c* 1, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 2*S*

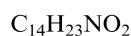
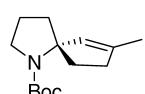


tert-Butyl (3*S*,5*R*)-4-[(*N*-methoxycarbonyl)-*N*-methylamino]-7-methyl-1-azaspiro[4.4]non-6-ene-1-carboxylate

$[\alpha]_D^{23} = -78.3$ (*c* 1, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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

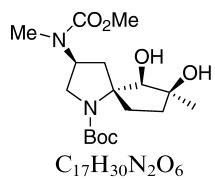


tert-Butyl (5*R*)-7-methyl-1-azaspiro[4.4]non-6-ene-1-carboxylate

$[\alpha]_D^{23} = -104.8$ (*c* 1, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 5*R*

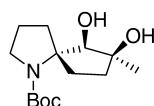


tert-Butyl (3*S*,5*R*,6*R*,7*S*)-6,7-dihydroxy-4-[(*N*-methoxycarbonyl)-*N*-methylamino]-7-methyl-1-azaspiro[4.4]nonane-1-carboxylate

$[\alpha]_D^{23} = +11.8$ (*c* 1.05, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

Absolute configuration: 3*S*,5*R*,6*R*,7*S*

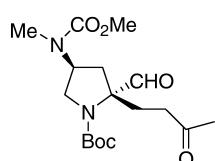


tert-Butyl (5*S*,6*R*,7*S*)-6,7-dihydroxy-7-methyl-1-azaspiro[4.4]nonane-1-carboxylate

$[\alpha]_D^{23} = +40.5$ (*c* 1.05, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 5*S*,6*R*,7*S*

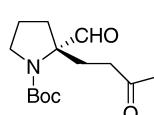


tert-Butyl (2*R*,4*S*)-2-formyl-4-[(*N*-methoxycarbonyl)-*N*-methylamino]-2-(3-oxobutyl)pyrrolidine-1-carboxylate

$[\alpha]_D^{23} = +12.5$ (*c* 1, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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

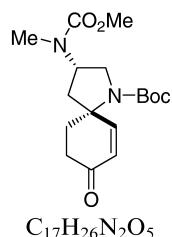


tert-Butyl (2*S*)-2-formyl-2-(3-oxobutyl)pyrrolidine-1-carboxylate

$[\alpha]_D^{23} = +11.9$ (*c* 1, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 2*S*

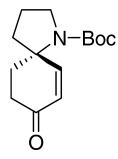


tert-Butyl (3*S*,5*R*)-4-[(*N*-methoxycarbonyl)-*N*-methylamino]-8-oxo-1-azaspiro[4.5]dec-6-ene-1-carboxylate

$[\alpha]_D^{23} = -18.3$ (*c* 1.05, CHCl₃)

Source of chirality: *trans*-4-hydroxy-L-proline

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



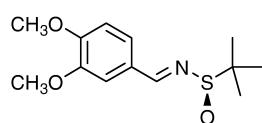
tert-Butyl (5*S*)-8-oxo-1-azaspiro[4.5]dec-6-ene-1-carboxylate

Ee $\geq 90\%$ by HPLC on Chiralpak® AD column

$[\alpha]_D^{23} = -111.5$ (*c* 0.95, CHCl₃)

Source of chirality: L-proline

Absolute configuration: 5*S*

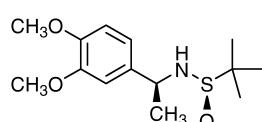


(*R*_S)-(-)-N-(3,4-Dimethoxybenzylidene)-2-methylpropanesulfinamide

$[\alpha]_D = -19.1$ (*c* 0.185, CH₂Cl₂)

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

Absolute configuration: (*R*_S)



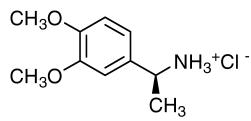
(*R*_S,*S*)-(-)-N-[1-(3,4-Dimethoxyphenylethyl)]-2-methylpropanesulfinamide

De 98% [by chiral HPLC analysis]

$[\alpha]_D = -100.0$ (*c* 1.105, CHCl₃)

Source of chirality: asymmetric synthesis

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

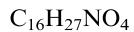
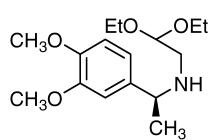


(*S*)-(-)-1-(3,4-Dimethoxyphenyl)ethylamine hydrochloride

$[\alpha]_D = -6.9$ (*c* 0.7, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

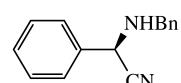


(*S*)-(-)-*N*-(2,2-Diethoxyethyl)-1-(3,4-dimethoxyphenyl)ethylamine

$[\alpha]_D = -29.6$ (*c* 0.8, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)



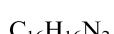
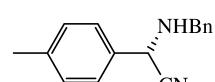
(*R*)-2-Benzylamino-phenylacetonitrile

Ee = 75%

$[\alpha]_D^{20} = +64.0$ (*c* 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)



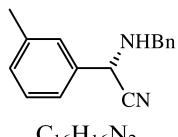
(*S*)-2-Benzylamino-(4-methylphenyl)acetonitrile

Ee = 70%

$[\alpha]_D^{20} = -32.2$ (*c* 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*S*)

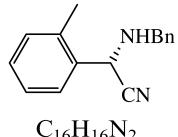


(S)-2-Benzylamino-(3-methylphenyl)acetonitrile

Ee = 74%
[α]_D²⁰ = -58.0 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

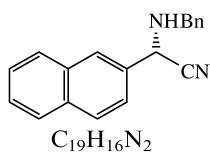


(S)-2-Benzylamino-(2-methylphenyl)acetonitrile

Ee = 52%
[α]_D²⁰ = -72.1 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

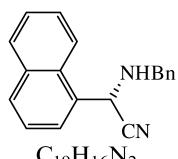


(S)-2-Benzylamino-(2-naphthyl)acetonitrile

Ee = 72%
[α]_D²⁰ = -4.0 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)

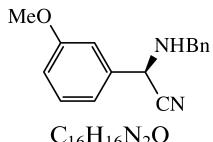


(S)-2-Benzylamino-(1-naphthyl)acetonitrile

Ee = 34%
[α]_D²⁰ = -112.0 (c 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



C₁₆H₁₆N₂O

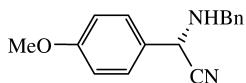
(R)-2-Benzylamino-(3-methoxyphenyl)acetonitrile

Ee = 59%

[α]_D²⁰ = +25.9 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)



C₁₉H₁₆N₂O

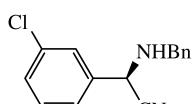
(S)-2-Benzylamino-(4-methoxyphenyl)acetonitrile

Ee = 72%

[α]_D²⁰ = -12.0 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



C₁₅H₁₃N₂Cl

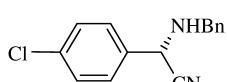
(R)-2-Benzylamino-(3-chlorophenyl)acetonitrile

Ee = 57%

[α]_D²² = +2.4 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)



C₁₅H₁₃N₂Cl

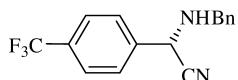
(S)-2-Benzylamino-(4-chlorophenyl)acetonitrile

Ee = 41%

[α]_D²⁰ = -19.7 (c 0.8, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



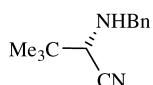
C₁₆H₁₃N₂F₃
(S)-2-Benzylamino-(4-trifluoromethylphenyl)acetonitrile

Ee = 31%

[α]_D²⁰ = -28.3 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



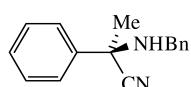
C₁₃H₁₈N₂
(S)-2-Benzylamino-3,3-dimethylbutanonitrile

Ee = 16%

[α]_D²⁰ = -29.3 (c 1, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (S)



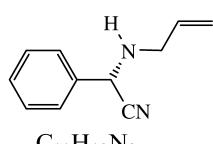
C₁₆H₁₆N₂
(R)-2-Benzylamino-2-phenyl-propanonitrile

Ee = 43%

[α]_D²¹ = +16.6 (c 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (R)



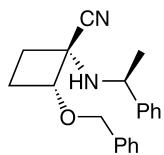
C₁₁H₁₂N₂
(S)-2-Allylamino-phenylacetonitrile

Ee = 31%

[α]_D²² = -65.5 (c 0.5, CHCl₃)

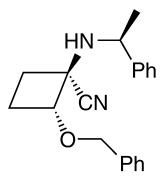
Source of chirality: asymmetric synthesis

Absolute configuration: (S)

 $C_{20}H_{22}N_2O$

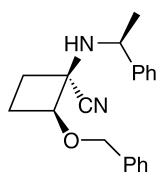
2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarbonitrile

Ee >99%

 $[\alpha]_D^{20} = -66$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*R*,1'*S*) assigned by X-ray analysis $C_{20}H_{22}N_2O$

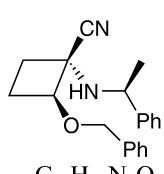
2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarbonitrile

Ee >99%

 $[\alpha]_D^{20} = -63$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*S*,2*R*,1'*S*) $C_{20}H_{22}N_2O$

2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarbonitrile

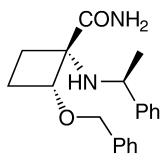
Ee >99%

 $[\alpha]_D^{20} = -78.5$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*S*,2*S*,1'*S*) $C_{20}H_{22}N_2O$

2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarbonitrile

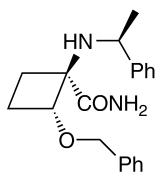
Ee >99%

 $[\alpha]_D^{20} = -101$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*S*,1'*S*)

 $C_{20}H_{24}N_2O_2$

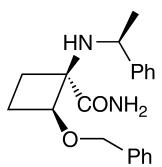
2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarboxamide

Ee >99%

 $[\alpha]_D^{20} = +62$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*S*,2*R*,1'*S*) assigned by X-ray analysis of precursor $C_{20}H_{24}N_2O_2$

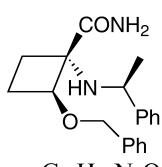
2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarboxamide

Ee >99%

 $[\alpha]_D^{20} = -26.6$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*R*,1'*S*) $C_{20}H_{24}N_2O_2$

2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarboxamide

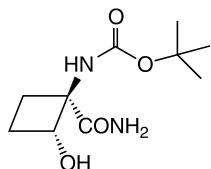
Ee >99%

 $[\alpha]_D^{20} = -67$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*R*,1'*S*) $C_{20}H_{24}N_2O_2$

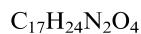
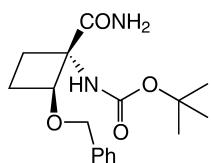
2-Benzyl-1-[(1'-phenylethyl)amino]cyclobutanecarboxamide

Ee >99%

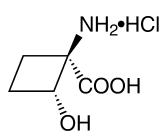
 $[\alpha]_D^{20} = +14$ (*c* 1, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*S*,2*S*,1'*S*)

1-(*N*-*tert*-Butyloxycarbonyl)amino-2-hydroxycyclobutanecarboxamide

Ee >99%

 $[\alpha]_D^{20} = -35.8$ (*c* 0.5, MeOH)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*R*)1-(*N*-*tert*-Butyloxycarbonyl)amino-2-benzyloxycyclobutanecarboxamide

Ee >99%

 $[\alpha]_D^{20} = +11.6$ (*c* 0.75, CHCl₃)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*S*,2*S*)

1-Amino-2-hydroxycyclobutanecarboxylic acid·hydrochloride

Ee >99%

 $[\alpha]_D^{20} = -8.8$ (*c* 0.30, H₂O)Source of chirality: (*S*)- α -phenylethylamineAbsolute configuration: (1*R*,2*R*)