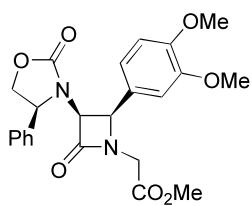


Stereochemistry abstracts

Carina M. L. Delpiccolo and Ernesto G. Mata*

Tetrahedron: Asymmetry 13 (2002) 905



$[\alpha]_D = +51.1$ (*c* 0.66, CHCl₃)

Source of chirality: asymmetric synthesis

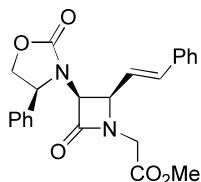
Absolute configuration: 3*S*,4*R*,4*S*

C₂₃H₂₄N₂O₇

(3*S*,4*R*)-1-(Methoxycarbonyl)methyl-4-(3,4-dimethoxyphenyl)-3-[(4*S*)-4-phenyl-2-oxooxazolidin-3-yl]-2-azetidinone

Carina M. L. Delpiccolo and Ernesto G. Mata*

Tetrahedron: Asymmetry 13 (2002) 905



$[\alpha]_D = +76.5$ (*c* 0.31, CHCl₃)

Source of chirality: asymmetric synthesis

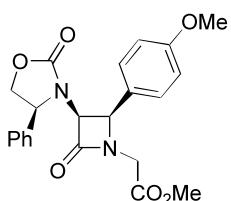
Absolute configuration: 3*S*,4*R*,4*S*

C₂₃H₂₂N₂O₅

(3*S*,4*R*)-1-(Methoxycarbonyl)methyl-3-[(4*S*)-4-phenyl-2-oxooxazolidin-3-yl]-4-styryl-2-azetidinone

Carina M. L. Delpiccolo and Ernesto G. Mata*

Tetrahedron: Asymmetry 13 (2002) 905



$[\alpha]_D = +52.9$ (*c* 1.46, CHCl₃)

Source of chirality: asymmetric synthesis

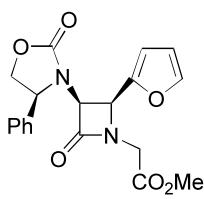
Absolute configuration: 3*S*,4*R*,4*S*

C₂₂H₂₂N₂O₆

(3*S*,4*R*)-1-(Methoxycarbonyl)methyl-4-(4-methoxyphenyl)-3-[(4*S*)-4-phenyl-2-oxooxazolidin-3-yl]-2-azetidinone

Carina M. L. Delpiccolo and Ernesto G. Mata*

Tetrahedron: Asymmetry 13 (2002) 905



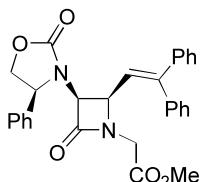
$[\alpha]_D = +48.3$ (*c* 0.85, CHCl₃)

Source of chirality: asymmetric synthesis

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

C₁₉H₁₈N₂O₆

(3*S*,4*S*)-4-(Furan-2-yl)-1-(methoxycarbonyl)methyl-3-[(4*S*)-4-phenyl-2-oxooxazolidin-3-yl]-2-azetidinone

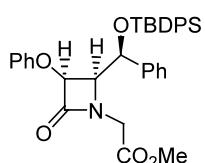
 $C_{29}H_{26}N_2O_5$

(3S,4R)-1-(Methoxycarbonyl)methyl-3-[(4S)-4-phenyl-2-oxazolidin-3-yl]-4-(2,2-diphenylvinyl)-2-azetidinone

 $[\alpha]_D = -42.9$ (*c* 0.48, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3S,4R,4S

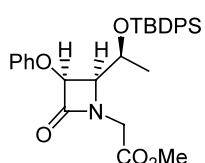
 $C_{35}H_{37}NO_5Si$

(3S,4S)-4-[(1S)-1-(tert-Butyldiphenylsilyloxy)phenylmethyl]-1-(methoxycarbonyl)methyl-3-phenoxy-2-azetidinone

 $[\alpha]_D = -41.8$ (*c* 1.31, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3S,4S,1Sd

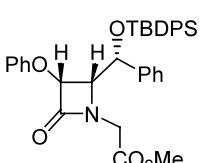
 $C_{30}H_{35}NO_5Si$

(3S,4S)-4-[(1S)-1-(tert-Butyldiphenylsilyloxy)ethyl]-1-(methoxycarbonyl)methyl-3-phenoxy-2-azetidinone

 $[\alpha]_D = -62.1$ (*c* 0.53, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3S,4S,1S

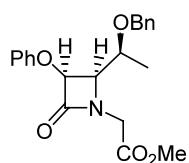
 $C_{35}H_{37}NO_5Si$

(3R,4R)-4-[(1R)-1-(tert-Butyldiphenylsilyloxy)phenylmethyl]-1-(methoxycarbonyl)methyl-3-phenoxy-2-azetidinone

 $[\alpha]_D = +45.2$ (*c* 0.64, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3R,4R,1R

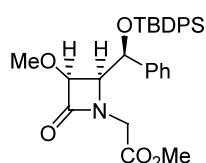


$C_{21}H_{23}NO_5$
(3S,4R)-4-[(1S)-1-Benzyl-1-oxoethyl]-1-(methoxycarbonyl)methyl-3-phenoxy-2-azetidinone

$[\alpha]_D = -69.2$ (*c* 0.27, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3S,4R,1S

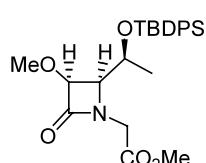


$C_{30}H_{35}NO_5Si$
(3S,4S)-4-[(1S)-1-(tert-Butyldiphenylsilyloxy)phenylmethyl]-1-(methoxycarbonyl)methyl-3-methoxy-2-azetidinone

$[\alpha]_D = +35.6$ (*c* 0.34, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: 3S,4S,1S

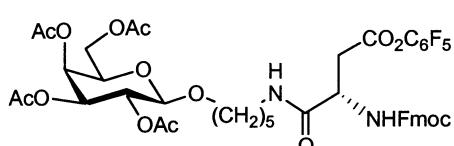


$C_{25}H_{33}NO_5Si$
(3S,4S)-4-[(1S)-1-(tert-Butyldiphenylsilyloxy)ethyl]-1-(methoxycarbonyl)methyl-3-methoxy-2-azetidinone

$[\alpha]_D = -49.0$ (*c* 0.67, CHCl₃)

Source of chirality: asymmetric synthesis

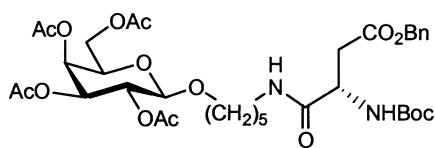
Absolute configuration: 3S,4S,1S



$C_{44}H_{45}F_5N_2O_{15}$
N-Fluorenylmethoxycarbonyl α-([5-aminopentyl]-2,3,4,6-tetra-O-acetyl-β-D-galactopyranosyl)-L-asparaginic acid pentafluorophenyl ester

$[\alpha]_D^{20} = -7.1$ (*c* 1.0, CHCl₃)

Source of chirality: optical pure starting materials

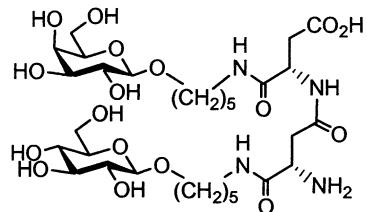


$C_{35}H_{50}N_2O_{15}$

α -t-Butyloxycarbonyl α -([5-aminopentyl]-2,3,4,6-tetra-O-acetyl- β -D-galactopyranosyl)-L-asparagine acid benzyl ester

$[\alpha]_D^{20} = -6.1$ (c 1.0, $CHCl_3$)

Source of chirality: optical pure starting materials

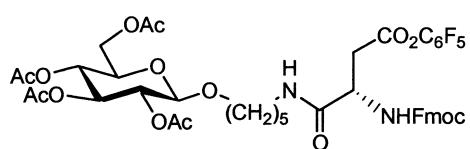


$C_{33}H_{59}N_5O_{18}$

α -([5-Aminopentyl]- β -D-glucopyranosyl)-L-asparagyl-(N^{α} -CO $^{\alpha}$)-L-alaninyl-(N^{α} -CO $^{\beta}$) α -([5-aminopentyl]- β -D-galactopyranosyl)-L-asparagine acid

$[\alpha]_D^{20} = -10.5$ (c 0.5, H_2O)

Source of chirality: optical pure starting materials

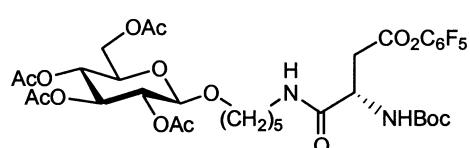


$C_{44}H_{45}F_5N_2O_{15}$

N -Fluorenylmethoxycarbonyl α -([5-aminopentyl]-2,3,4,6-tetra-O-acetyl- β -D-glucopyranosyl)-L-asparagine acid pentafluorophenyl ester

$[\alpha]_D^{20} = -8.6$ (c 1.0, $CHCl_3$)

Source of chirality: optical pure starting materials



$C_{34}H_{43}F_5N_2O_{15}$

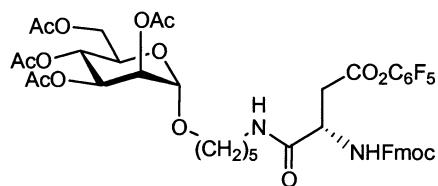
t -Butyloxycarbonyl α -([5-aminopentyl]-2,3,4,6-tetra-O-acetyl- β -D-glucopyranosyl)-L-asparagine acid pentafluorophenyl ester

$[\alpha]_D^{20} = -14.2$ (c 1.0, $CHCl_3$)

Source of chirality: optical pure starting materials

Thomas Ziegler,* Dirk Röseling and
Lakshminarayananapuram R. Subramanian

Tetrahedron: Asymmetry 13 (2002) 911



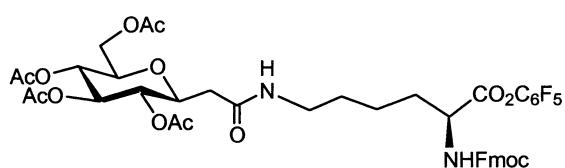
N-Fluorenylmethoxycarbonyl α -([5-aminopentyl]-2,3,4,6-tetra-*O*-acetyl- α -D-mannopyranosyl)-L-asparagine acid pentafluorophenyl ester

[α]_D²⁰ = +19.9 (*c* 1.0, CHCl₃)

Source of chirality: optical pure starting materials

Thomas Ziegler,* Dirk Röseling and
Lakshminarayananapuram R. Subramanian

Tetrahedron: Asymmetry 13 (2002) 911



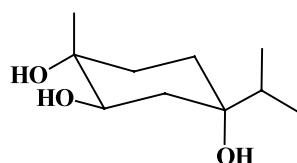
1- ϵ -[*N*- α -Fluorenylmethoxycarbonyl- α -pentafluorophenyl-L-lysine]-4,5,6,7-tetra-*O*-acetyl-3,7-anhydro-D-glycero-D-gulo-octanosyl amide

[α]_D²⁰ = -11.5 (*c* 1.0, CHCl₃)

Source of chirality: optical pure starting materials

Ioan Cristea,* Erika Kozma and Carmen Batiu

Tetrahedron: Asymmetry 13 (2002) 915



(1*R*,2*R*,4*S*)-4-Isopropyl-1-methylcyclohexane-1,2,4-triol

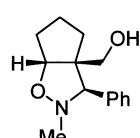
[α]_D²⁰ = -5.5 (*c* = 1.5, EtOH)

Source of chirality: (*S*)-(+)terpinen-4-ol by stereoselective *trans*-dihydroxylation

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

Staffan Karlsson* and Hans-Erik Högberg

Tetrahedron: Asymmetry 13 (2002) 923



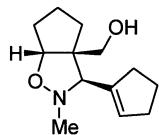
[(3*R*,3*a**R*,6*a**R*)-2-Methyl-3-phenylhexahydro-3*a*H-cyclopenta[*d*]isoxazol-3*a*-yl]-methanol

E.e. = 93%

[α]_D²⁵ = -153.1 (*c* = 0.80, CHCl₃)

Source of chirality: enantioselective 1,3-dipolar cycloaddition reaction

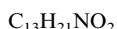
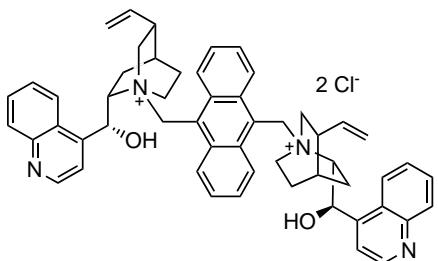
Absolute configuration: 3*R*,3*a**R*,6*a**R*



E.e. = 92%

 $[\alpha]_D^{25} = -128.6$ ($c = 0.44$, CHCl₃)

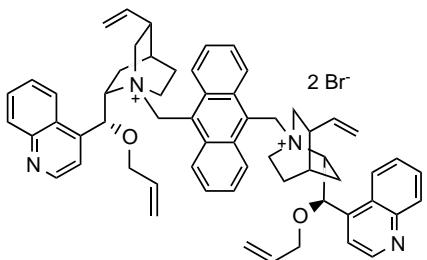
Source of chirality: enantioselective 1,3-dipolar cycloaddition reaction

Absolute configuration: 3*R*,3a*R*,6a*R*[(3*R*,3a*R*,6a*R*)-3-Cyclopent-1-en-1-yl-2-methylhexahydro-3a*H*-cyclopenta[*d*]isoxazol-3a-yl]-methanol

Mp 197°C (decomp.)

 $[\alpha]_D^{25} -579$ (c 0.5, CHCl₃)

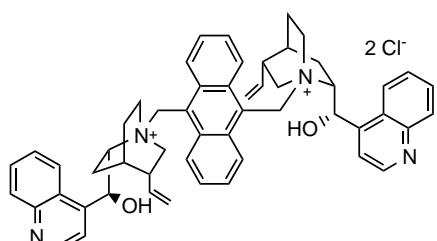
Source of chirality: (-)-cinchonidine

 α,α' -Bis(cinchonidinium)-9,10-dimethylanthracene dichloride

Mp 156°C

 $[\alpha]_D^{25} -282$ (c 1, CHCl₃)

Source of chirality: (-)-cinchonidine

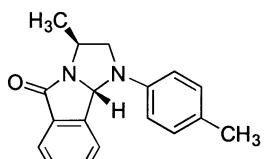
 α,α' -Bis[*O*(9)-allylcinchonidinium]-9,10-dimethylanthracene dibromide

Mp 194°C (decomp.)

 $[\alpha]_D^{25} +400$ (c 0.5, CHCl₃)

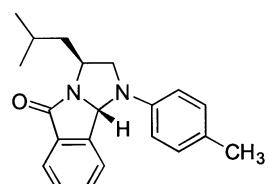
Source of chirality: (+)-cinchonine

 α,α' -Bis(cinchoninium)-9,10-dimethylanthracene dichloride

 $C_{18}H_{18}N_2O$

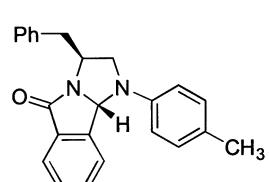
(3S,9bS)-1-(4-Methylphenyl)-3-methyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

D.e. >99%

 $[\alpha]_D^{25} = -482$ (*c* 1.68, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-alanineAbsolute configuration: 3*S*,9*bS* $C_{21}H_{24}N_2O$

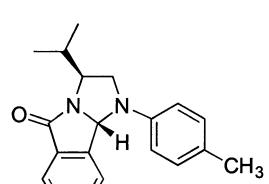
(3S,9bS)-1-(4-Methylphenyl)-3-isobutyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

D.e. >99%

 $[\alpha]_D^{25} = -449$ (*c* 1.78, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-leucineAbsolute configuration: 3*S*,9*bS* $C_{24}H_{22}N_2O$

(3S,9bS)-1-(4-Methylphenyl)-3-benzyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

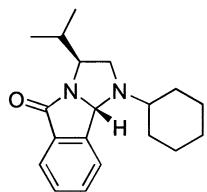
D.e. >99%

 $[\alpha]_D^{25} = -376$ (*c* 1.57, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-phenylalanineAbsolute configuration: 3*S*,9*bS* $C_{20}H_{22}N_2O$

(3S,9bS)-1-(4-Methylphenyl)-3-isopropyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

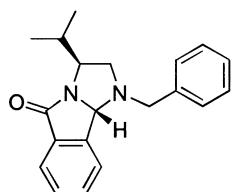
D.e. >99%

 $[\alpha]_D^{25} = -373$ (*c* 1.66, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*bS*

 $C_{19}H_{26}N_2O$

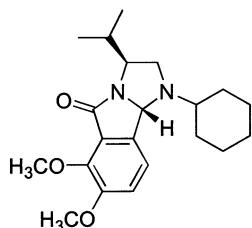
(3S,9bS)-1-Cyclohexyl-3-isopropyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

D.e. >99%

 $[\alpha]_D^{25} = -32.5$ (*c* 1.66, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*bS* $C_{20}H_{22}N_2O$

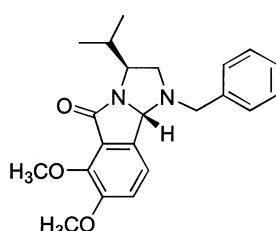
(3S,9bS)-1-Benzyl-3-isopropyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

D.e. >99%

 $[\alpha]_D^{25} = +1.3$ (*c* 1.58, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*bS* $C_{21}H_{30}N_2O_3$

(3S,9bS)-1-Cyclohexyl-3-isopropyl-6,7-dimethoxy-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

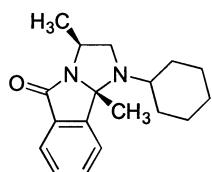
D.e. >99%

 $[\alpha]_D^{25} = -47.5$ (*c* 1.66, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*bS* $C_{22}H_{26}N_2O_3$

(3S,9bS)-1-Benzyl-3-isopropyl-6,7-dimethoxy-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

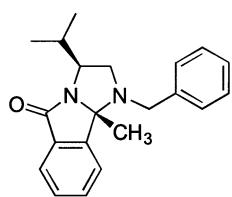
D.e. >99%

 $[\alpha]_D^{25} = +4.3$ (*c* 1.66, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*bS*

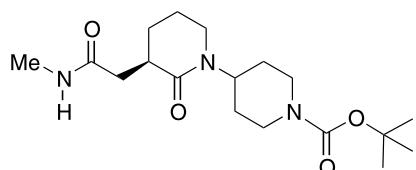
 $C_{18}H_{24}N_2O$

(3S,9bS)-1-Cyclohexyl-3,9b-dimethyl-1,2,3,9b-tetrahydro-5H-imidazo[2,1-a]isoindol-5-one

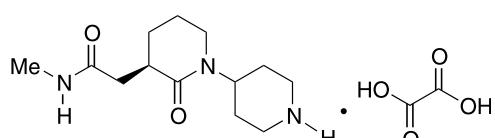
D.e. >99%

 $[\alpha]_D^{25} = +2.6$ (*c* 1.50, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-alanineAbsolute configuration: 3*S*,9*b**S* $C_{21}H_{24}N_2O$ (3*S*,9*b**S*)-1-Benzyl-3-isopropyl-9*b*-methyl-1,2,3,9*b*-tetrahydro-5*H*-imidazo[2,1-*a*]isoindol-5-one

D.e. >99%

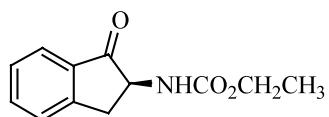
 $[\alpha]_D^{25} = +25.3$ (*c* 1.51, CHCl₃)Source of chirality: *N*-(*tert*-butoxycarbonyl)-L-valineAbsolute configuration: 3*S*,9*b**S* $C_{18}H_{32}N_3O_4$
(3*R*)-[2-(Methylamino)-2-oxoethyl]-2-oxo-[1,4'-bipiperidine]-1'-carboxylic acid, 1,1-dimethylethyl ester

E.e. >98%

 $[\alpha]_D^{23} = +30$ (*c* 0.5, methanol)Source of chirality: (*R*)-4-benzyl-2-oxazolidinoneAbsolute configuration: 3*R* $C_{13}H_{23}N_3O_2$ (3*R*)-*N*-Methyl-2-oxo-[1,4'-bipiperidine]-3-acetamide, oxalate salt

E.e. >99%

 $[\alpha]_D^{23} = +32.6$ (*c* 0.2, methanol)Source of chirality: (*R*)-4-benzyl-2-oxazolidinoneAbsolute configuration: 3*R*

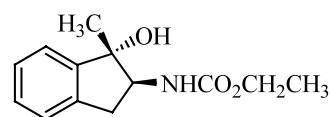


$C_{12}H_{13}NO_3$
(*S*)-2-[(Ethoxycarbonyl)amino]-1-indanone

$[\alpha]_D^{20} = +12.0$ (*c* 1.21, CH₃OH)

Source of chirality: L-phenylalanine

Absolute configuration: *S*

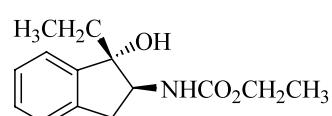


$C_{13}H_{17}NO_3$
trans-(1*S*,2*S*)-1-Methyl-2-[(*N*-ethoxycarbonyl)amino]-1-indanol

$[\alpha]_D^{20} = -7.6$ (*c* 0.82, CH₃OH)

Source of chirality: L-phenylalanine

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

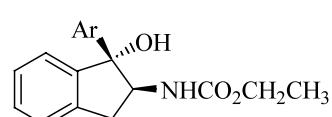


$C_{14}H_{19}NO_3$
trans-(1*S*,2*S*)-1-Ethyl-2-[(*N*-ethoxycarbonyl)amino]-1-indanol

$[\alpha]_D^{20} = -9.7$ (*c* 0.99, CH₃OH)

Source of chirality: L-phenylalanine

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

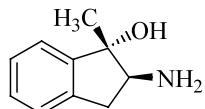


$C_{18}H_{19}NO_3$
trans-(1*S*,2*S*)-1-Phenyl-2-[(*N*-ethoxycarbonyl)amino]-1-indanol

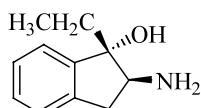
$[\alpha]_D^{20} = -122.0$ (*c* 0.81, CH₃OH)

Source of chirality: L-phenylalanine

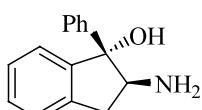
Absolute configuration: 1*S*,2*S*

 $C_{10}H_{13}NO_3$ *trans*-(1*S*,2*S*)-1-Methyl-2-amino-1-indanol $[\alpha]_D^{20} = +22.5$ (*c* 0.60, CH₃OH)

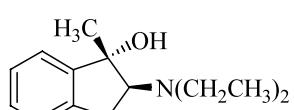
Source of chirality: L-phenylalanine

Absolute configuration: 1*S*,2*S* $C_{11}H_{15}NO$ *trans*-(1*S*,2*S*)-1-Ethyl-2-amino-1-indanol $[\alpha]_D^{20} = +29.2$ (*c* 0.60, CH₃OH)

Source of chirality: L-phenylalanine

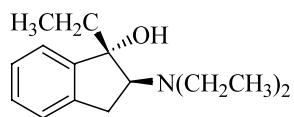
Absolute configuration: 1*S*,2*S* $C_{15}H_{15}NO$ *trans*-(1*S*,2*S*)-1-Phenyl-2-amino-1-indanol $[\alpha]_D^{20} = +67.8$ (*c* 0.51, CH₃OH)

Source of chirality: L-phenylalanine

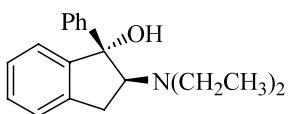
Absolute configuration: 1*S*,2*S* $C_{14}H_{21}NO$ *trans*-(1*S*,2*S*)-1-Methyl-2-(*N,N*-diethylamino)-1-indanol $[\alpha]_D^{20} = +34.6$ (*c* 0.55, CH₃OH)

Source of chirality: L-phenylalanine

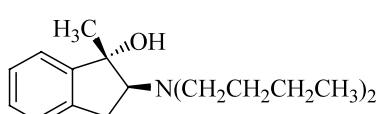
Absolute configuration: 1*S*,2*S*

 $C_{15}H_{23}NO$ *trans*-(1*S*,2*S*)-1-Ethyl-2-(*N,N*-diethylamino)-1-indanol $[\alpha]_D^{20} = +35.8$ (*c* 0.53, CH₃OH)

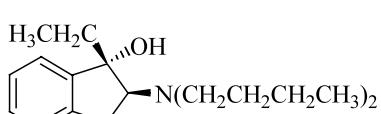
Source of chirality: L-phenylalanine

Absolute configuration: 1*S*,2*S* $C_{19}H_{23}NO$ *trans*-(1*S*,2*S*)-1-Phenyl-2-(*N,N*-diethylamino)-1-indanol $[\alpha]_D^{20} = -31.6$ (*c* 0.49, CH₃OH)

Source of chirality: L-phenylalanine

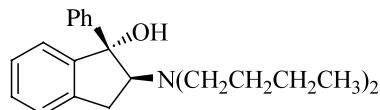
Absolute configuration: 1*S*,2*S* $C_{18}H_{29}NO$ *trans*-(1*S*,2*S*)-1-Methyl-2-(*N,N*-dibutylamino)-1-indanol $[\alpha]_D^{20} = +26.9$ (*c* 0.64, CH₃OH)

Source of chirality: L-phenylalanine

Absolute configuration: 1*S*,2*S* $C_{19}H_{31}NO$ *trans*-(1*S*,2*S*)-1-Ethyl-2-(*N,N*-dibutylamino)-1-indanol $[\alpha]_D^{20} = +41.4$ (*c* 0.72, CH₃OH)

Source of chirality: L-phenylalanine

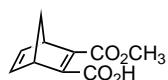
Absolute configuration: 1*S*,2*S*

 $C_{23}H_{31}NO$ trans-(1*S*,2*S*)-1-Phenyl-2-(*N,N*-dibutylamino)-1-indanol $[\alpha]_D^{20} = -21.2$ (*c* 0.64, CH₃OH)

Source of chirality: L-phenylalanine

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

Yasuhiro Kashima, Jianxiu Liu, Shigeharu Takenami and Satomi Niwayama*

 $C_{10}H_{10}O_4$

3-Methoxycarbonylbicyclo[2.2.1]hept-2,5-diene-2-carboxylic acid

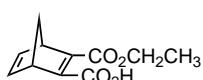
E.e. >99%

 $[\alpha]_D = -25.7$ (*c* = 1.9, CHCl₃)

Source of chirality: enzyme reaction

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

Yasuhiro Kashima, Jianxiu Liu, Shigeharu Takenami and Satomi Niwayama*

 $C_{11}H_{12}O_4$

3-Ethoxycarbonylbicyclo[2.2.1]hept-2,5-diene-2-carboxylic acid

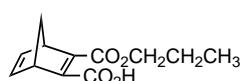
E.e. >99%

 $[\alpha]_D = -13.4$ (*c* = 2.4, CHCl₃)

Source of chirality: enzyme reaction

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

Yasuhiro Kashima, Jianxiu Liu, Shigeharu Takenami and Satomi Niwayama*

 $C_{12}H_{14}O_4$

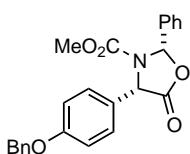
3-Propoxycarbonylbicyclo[2.2.1]hept-2,5-diene-2-carboxylic acid

E.e. >99%

 $[\alpha]_D = -9.7$ (*c* = 2.6, CHCl₃)

Source of chirality: enzyme reaction

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



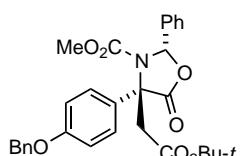
C₂₄H₂₁NO₅

(2*R*,4*S*)-2-Phenyl-4-((4-phenylmethoxy)phenyl)-5-oxo-3-oxazolidinine-carboxylic acid, methyl ester

[α]_D²⁰ = +68 (*c* 2.5, CHCl₃)

Source of chirality: using (*S*)-4-hydroxyphenylglycine as starting material

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



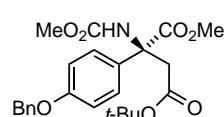
C₃₀H₃₁NO₇

(2*R*,4*S*)-[2-Phenyl-3-(methoxycarbonyl)amino-4-(4-phenylmethoxy)phenyloxazolidin-4-yl]acetic acid, *tert*-butyl ester

[α]_D²⁰ = -9.2 (*c* 1.0, CHCl₃)

Source of chirality: using (*S*)-4-hydroxyphenylglycine as starting material

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



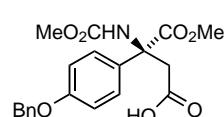
C₂₄H₂₉NO₇

(*S*)-2-(Methoxycarbonyl)amino-2-(4-phenylmethoxy)phenylsuccinic acid, 1-methyl ester, 4-*tert*-butyl ester

[α]_D²⁰ = +19.3 (*c* 1.0, CHCl₃)

Source of chirality: using (*S*)-4-hydroxyphenylglycine as starting material

Absolute configuration: *S*



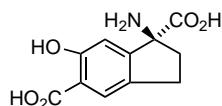
C₂₀H₂₁NO₇

(*S*)-2-(Methoxycarbonyl)amino-2-(4-phenylmethoxy)phenylsuccinic acid, 1-methyl ester

[α]_D²⁰ = +32.8 (*c* 1.1, CHCl₃)

Source of chirality: using (*S*)-4-hydroxyphenylglycine as starting material

Absolute configuration: *S*

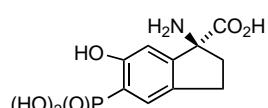


(S)-6-Hydroxy-1-aminoindan-1,5-dicarboxylic acid

$[\alpha]_D^{20} = +87.2$ (*c* 0.1, 6N HCl)

Source of chirality: using (*S*)-phenylglycine as starting material

Absolute configuration: *S*

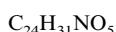
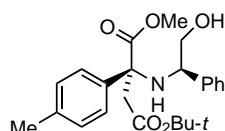


(S)-6-Hydroxy-5-phosphono-1-aminoindan-1-carboxylic acid

$[\alpha]_D^{20} = +76.3$ (*c* 0.1, 6N HCl)

Source of chirality: using (*S*)-phenylglycine as starting material

Absolute configuration: *S*

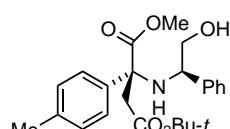


(S)-2-((*R*)-2-Hydroxy-1-phenylethylamino)-2-(4-methylphenyl)succinic acid 4-*tert*-butyl ester, 1-methyl ester

$[\alpha]_D^{18} = -2.6$ (*c* 1.5, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S,R*



(*R*)-2-((*R*)-2-Hydroxy-1-phenylethylamino)-2-(4-methylphenyl)succinic acid 4-*tert*-butyl ester, 1-methyl ester

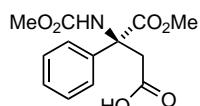
$[\alpha]_D^{20} = +23.5$ (*c* 2.6, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *R,R*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961



(S)-2-(Methoxycarbonyl)amino-2-phenylsuccinic acid, 1-methyl ester

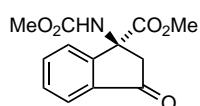
$[\alpha]_D^{20} = +31.3$ (*c* 1.1, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: *S*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961



(S)-1-(Methoxycarbonyl)amino-3-oxoindan-1-carboxylic acid, methyl ester

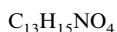
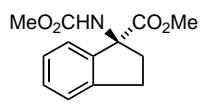
$[\alpha]_D^{20} = +188.4$ (*c* 1.0, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: *S*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961



(S)-1-(Methoxycarbonyl)aminoindan-1-carboxylic acid, methyl ester

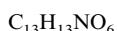
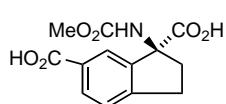
$[\alpha]_D^{20} = +118.6$ (*c* 0.95, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: *S*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961

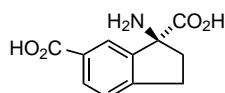


(S)-1-(Methoxycarbonyl)aminoindan-1,6-dicarboxylic acid

$[\alpha]_D^{20} = +124.1$ (*c* 0.11, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: *S*

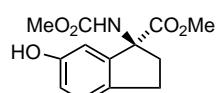


C₁₀H₁₁NO₄
(S)-1-Aminoindan-1,6-dicarboxylic acid

[α]_D²⁰ = +81 (c 0.11, H₂O)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: S

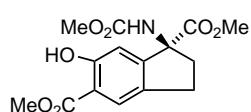


C₁₃H₁₅NO₅
(S)-6-Hydroxy-1-(methoxycarbonyl)aminoindan-1-carboxylic acid, methyl ester

[α]_D²⁰ = +45.5 (c 0.6, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: S

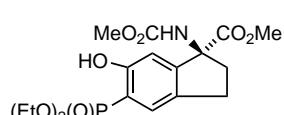


C₁₆H₁₉NO₇
(S)-6-Hydroxy-1-(methoxycarbonyl)aminoindan-1,5-dicarboxylic acid, dimethyl ester

[α]_D²⁰ = +116.3 (c 0.94, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: S

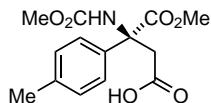


C₁₇H₂₄NO₈P
(S)-6-Hydroxy-5-diethylphosphono-1-(methoxycarbonyl)aminoindan-1-carboxylic acid, methyl ester

[α]_D²⁰ = +103.9 (c 0.2, CHCl₃)

Source of chirality: using (S)-phenylglycine as starting material

Absolute configuration: S



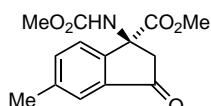
C₁₄H₁₇NO₆

(S)-2-(Methoxycarbonyl)amino-2-(4-methylphenyl)succinic acid, 1-methyl ester

[α]_D¹⁸ = +12.0 (*c* 2.3, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*



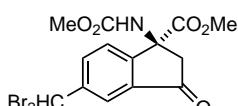
C₁₄H₁₅NO₅

(S)-1-(Methoxycarbonyl)amino-5-methyl-3-oxoindan-1-carboxylic acid methyl ester

[α]_D¹⁸ = +78 (*c* 0.7, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*



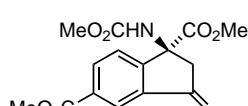
C₁₄H₁₃Br₂NO₅

(S)-1-(Methoxycarbonyl)amino-5-dibromomethyl-3-oxoindan-1-carboxylic acid methyl ester

[α]_D¹⁸ = +51 (*c* 1.0, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*



C₁₅H₁₅NO₇

(S)-1-(Methoxycarbonyl)amino-3-oxoindan-1,5-dicarboxylic acid, dimethyl ester

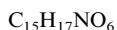
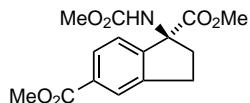
[α]_D¹⁸ = +87.4 (*c* 286, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961



(S)-1-(Methoxycarbonyl)amino-3-indan-1,5-dicarboxylic acid, dimethyl ester

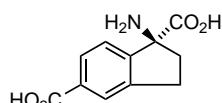
$[\alpha]_D^{18} = +44.8$ (*c* 3.2, CHCl₃)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*

Dawei Ma,* Ke Ding, Hongqi Tian, Baomin Wang
and Dongliang Cheng

Tetrahedron: Asymmetry 13 (2002) 961



(S)-1-Amino-3-indan-1,5-dicarboxylic acid

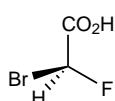
$[\alpha]_D^{18} = +83.5$ (*c* 0.9, 6N HCl)

Source of chirality: using (*R*)-phenylglycinol as starting material

Absolute configuration: *S*

Hélène Boussac, Jeanne Crassous,* Jean-Pierre Dutasta,
Laurent Grosvalet and Alain Thozet

Tetrahedron: Asymmetry 13 (2002) 975



(S)-Bromofluoroacetic acid

E.e. $\geq 99\%$

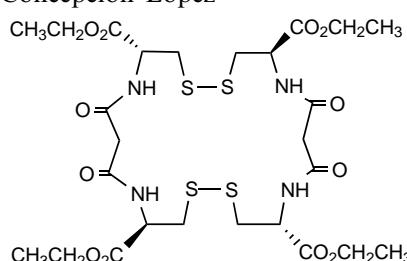
$[\alpha]_D^{25} = +28.0$ (*c* 1.1, acetone)

Source of chirality: resolution with (*R*)-(+) α -methylbenzylamine

Absolute configuration: *S*

Laura Gibert, Asensio González,* Jaume Granell and
Concepción López

Tetrahedron: Asymmetry 13 (2002) 983



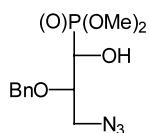
Cyclo(malonyl-L-cysteine ethyl ester)₂

E.e. = 100%

$[\alpha]_D^{20} = -88$ (*c* = 0.1, DMSO)

Source of chirality: L-cysteine

Absolute configuration: *R,R,R,R*

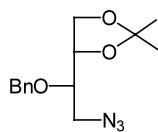


$C_{12}H_{18}N_3O_5P$
 Dimethyl (1*S*,2*S*)-3-azido-2-benzyloxy-1-hydroxypropylphosphonate

E.e. = 100%

 $[\alpha]_D = +16.6$ (*c* 2.19, chloroform)

Source of chirality: L-ascorbic acid

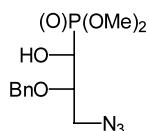
Absolute configuration: 1*S*,2*S*

$C_{14}H_{19}N_3O_3$
 (2*S*,3*S*)-4-Azido-3-benzyloxy-1,2-*O*-isopropylidene-1,2-butanediol

E.e. = 100%

 $[\alpha]_D = +10.5$ (*c* 2.47, chloroform)

Source of chirality: L-ascorbic acid

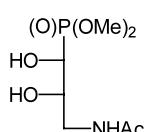
Absolute configuration: 1*S*,2*R*

$C_{12}H_{18}N_3O_5P$
 Dimethyl (1*R*,2*S*)-3-azido-2-benzyloxy-1-hydroxypropylphosphonate

E.e. = 100%

 $[\alpha]_D = +23.4$ (*c* 1.02, chloroform)

Source of chirality: L-ascorbic acid

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

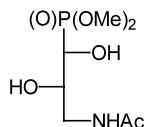
$C_7H_{18}NO_7P$
 Dimethyl (1*R*,2*S*)-3-acetamido-1,2-dihydroxypropylphosphonate

E.e. = 100%

 $[\alpha]_D = +35.6$ (*c* 1.81, chloroform)

Source of chirality: L-ascorbic acid

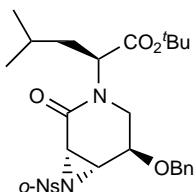
Absolute configuration: 1*R*,2*S*

Dimethyl (1*S*,2*S*)-3-acetamido-1,2-dihydroxypropylphosphonate

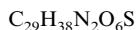
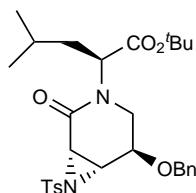
E.e. = 100%

 $[\alpha]_D = -12.4$ (*c* 2.12, chloroform)

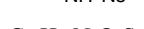
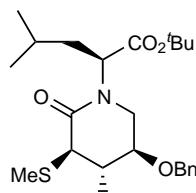
Source of chirality: L-ascorbic acid

Absolute configuration: 1*S*,2*S*(3*S*,4*R*,5*R*)-5-Benzylxyloxy-*N*-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-3,4-[*N*-(*o*-nitrobenzenesulfonyl)aziridino]piperidin-2-one $[\alpha]_D = -119$ (*c* = 1.1, CHCl₃)

Source of chirality: enantioselective synthesis

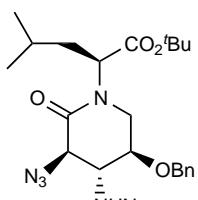
Absolute configuration: α *S*,3*S*,4*R*,5*R*(3*S*,4*R*,5*R*)-5-Benzylxyloxy-*N*-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-3,4-[*N*-(*p*-toluenesulfonyl)aziridino]piperidin-2-one $[\alpha]_D = +54$ (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*S*,4*R*,5*R*(3*R*,4*S*,5*R*)-5-Benzylxyloxy-*N*-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-3-methylthio-4-(*o*-nitrobenzenesulfonamido)piperidin-2-one $[\alpha]_D = +39$ (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*R*,4*S*,5*R*



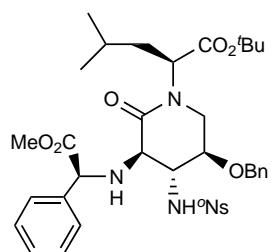
C₂₈H₃₆N₆O₈S

(3*R*,4*R*,5*R*)-3-Azido-5-benzyloxy-*N*-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-4-(*o*-nitrobenzenesulfonamido)piperidin-2-one

[α]_D = +16 (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*R*,4*R*,5*R*



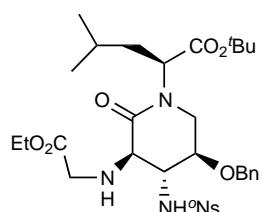
C₃₇H₄₆N₄O₁₀S

(3*R*,4*R*,5*R*)-5-Benzyl-3-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-4-[(methoxycarbonyl)benzylamino]-4-(*o*-nitrobenzenesulfonamido)piperidin-2-one

[α]_D = -136 (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*R*,4*R*,5*R*



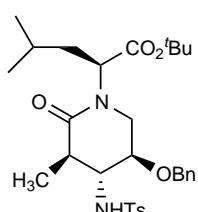
C₃₂H₄₄N₄O₁₀S

(3*R*,4*R*,5*R*)-5-Benzyl-3-[(ethoxycarbonylmethylamino)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-4-(*o*-nitrobenzenesulfonamido)piperidin-2-one

[α]_D = -40 (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*R*,4*R*,5*R*



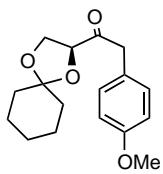
C₃₀H₄₂N₂O₆S

(3*R*,4*R*,5*R*)-5-Benzyl-3-[(1*S*)-1-(*tert*-butoxycarbonyl)-3-methylbutyl]-4-(*p*-toluenesulfonamido)piperidin-2-one

[α]_D = +3 (*c* = 1.0, CHCl₃)

Source of chirality: enantioselective synthesis

Absolute configuration: α *S*,3*R*,4*R*,5*R*



C₁₇H₂₂O₄

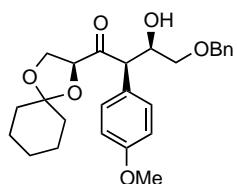
1-(1,4-Dioxaspiro[4.5]dec-2-yl)-2-(4-methoxyphenyl)ethanone

E.e. >96% (by preparation method)

[α]_D²² = -99.3 (c 0.5 in CHCl₃)

Source of chirality: synthesis from L-erythrulose

Absolute configuration: 2'S



C₂₆H₃₂O₆

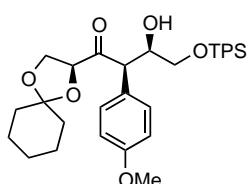
1,2-O-Cyclohexyldiene-6-O-benzyl-1,2,5,6-tetrahydroxy-4-(4-methoxyphenyl)hexan-3-one

E.e. >96% (by preparation method)

[α]_D²² = +83.6 (c 5 in CHCl₃)

Source of chirality: synthesis from L-erythrulose

Absolute configuration: 2S,4R,5R



C₃₅H₄₄O₆Si

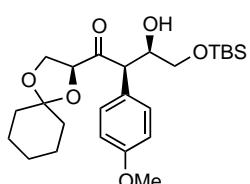
1,2-O-Cyclohexyldiene-6-O-(t-butyldiphenylsilyl)-1,2,5,6-tetrahydroxy-4-(4-methoxyphenyl)hexan-3-one

E.e. >96% (by preparation method)

[α]_D²² = +33.2 (c 5.7 in CHCl₃)

Source of chirality: synthesis from L-erythrulose

Absolute configuration: 2S,4R,5R



C₂₅H₄₀O₆Si

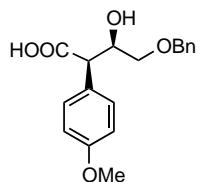
1,2-O-Cyclohexyldiene-6-O-(t-butyldimethylsilyl)-1,2,5,6-tetrahydroxy-4-(4-methoxyphenyl)hexan-3-one

E.e. >96% (by preparation method)

[α]_D²² = +58.6 (c 7.7 in CHCl₃)

Source of chirality: synthesis from L-erythrulose

Absolute configuration: 2S,4R,5R



C₁₈H₂₀O₅

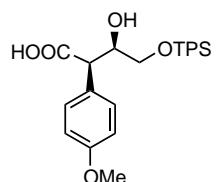
4-Benzyl-3-hydroxy-2-(4-methoxyphenyl)butanoic acid

E.e. >96% (by preparation method)

[α]_D²² = +20 (c 0.5, CHCl₃)

Source of chirality: synthesis from L-erythrulose

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



C₂₇H₃₂O₅Si

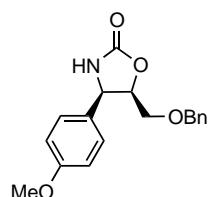
4-(*t*-Butyldiphenylsilyloxy)-3-hydroxy-2-(4-methoxyphenyl)butanoic acid

E.e. >96% (by preparation method)

[α]_D²² = +26.3 (c 4, CHCl₃)

Source of chirality: synthesis from L-erythrulose

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



C₁₈H₁₉NO₄

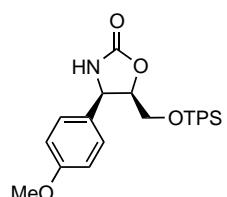
5-Benzyl-4-(4-methoxyphenyl)oxazolidin-2-one

E.e. >96% (by preparation method)

[α]_D²² = -44.8 (c 0.8, CHCl₃)

Source of chirality: synthesis from L-erythrulose

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



C₂₇H₃₁NO₄Si

5-(*t*-Butyldiphenylsilyloxy)methyl-4-(4-methoxyphenyl)oxazolidin-2-one

E.e. >96% (by preparation method)

[α]_D²² = -27.3 (c 5.9, CHCl₃)

Source of chirality: synthesis from L-erythrulose

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