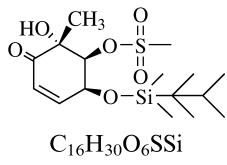


Stereochemistry abstracts

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



(2*R*,3*S*,4*S*)-3-Methansulfonyloxy-4-(dimethylhexylsilyl)oxy-2-hydroxy-2-methyl-5-cyclohexen-1-one

Ee >98%

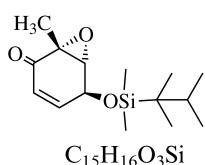
$[\alpha]_D^{20} = +28.2$ (*c* 1.0, CH₂Cl₂)

Source of chirality: enzymatic catalysis

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

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



(1*R*,5*S*,6*R*)-5-(Dimethylhexylsilyl)oxy-1-methyl-7-oxa-bibyclo[4.1.0]hept-3-en-2-one

Ee >98%

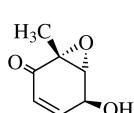
$[\alpha]_D^{20} = -66.0$ (*c* 123, CH₂Cl₂)

Source of chirality: enzymatic catalysis

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

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



(1*R*,5*S*,6*R*)-5-Hydroxy-1-methyl-7-oxa-bibyclo[4.1.0]hept-3-en-2-one

Ee >98%

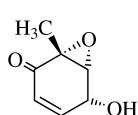
$[\alpha]_D^{20} = -147.1$ (*c* 1.3, CH₂Cl₂)

Source of chirality: enzymatic catalysis

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

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



(1*R*,5*R*,6*R*)-5-Hydroxy-1-methyl-7-oxa-bibyclo[4.1.0]hept-3-en-2-one

Ee >98%

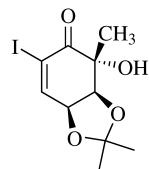
$[\alpha]_D^{20} = -9.2$ (*c* 1.1, CH₂Cl₂)

Source of chirality: enzymatic catalysis

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

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and
Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



C₁₀H₁₃IO₄
(2S,3S,4R)-4-Hydroxy-6-iodo-2,2,4-trimethyl-3a,7a-dihydro-4H-benzo[1,3]dioxol-5-one

Ee >98%

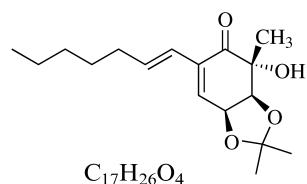
[α]_D²⁰ = -61.5 (c 0.29, MeOH)

Source of chirality: enzymatic catalysis

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

Maitia Labora, Viviana L. Heguaburu, Enrique M. Pandolfi and
Valeria Schapiro*

Tetrahedron: Asymmetry 19 (2008) 893



C₁₇H₂₆O₄
(2S,3S,4R)-6-Hept-1-enyl-4-hydroxy-2,2,4-trimethyl-3a,7a-dihydro-4H-benzo[1,3]dioxol-5-one

Ee >98%

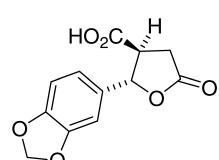
[α]_D²⁰ = -63.6 (c 0.27, CH₂Cl₂)

Source of chirality: enzymatic catalysis

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

Hyun-Chul Kim and Oee-Sook Park*

Tetrahedron: Asymmetry 19 (2008) 896



C₁₂H₁₀O₆
(2S,3S)-2-(Benzo[d][1,3]dioxol-5-yl)tetrahydro-5-oxofuran-3-carboxylic acid

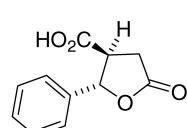
[α]_D²⁵ = -44.2 (c 1.0, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)

Hyun-Chul Kim and Oee-Sook Park*

Tetrahedron: Asymmetry 19 (2008) 896

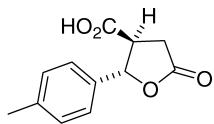


C₁₁H₁₀O₄
(2S,3S)-Tetrahydro-5-oxo-2-phenylfuran-3-carboxylic acid

[α]_D²⁵ = -37.4 (c 1.0, MeOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,3S)



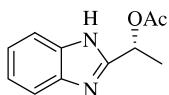
$[\alpha]_D^{25} = -31.3$ (*c* 1.0, MeOH)

Source of chirality: asymmetric synthesis

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



(2*S*,3*S*)-Tetrahydro-5-oxo-2-*p*-tolylfuran-3-carboxylic acid



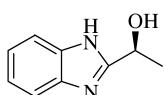
$[\alpha]_D = +59.4$ (*c* 0.9, CH₃OH)

Source of chirality: kinetic resolution

Absolute configuration: (R)



(*R*)-1-(1*H*-Benzimidazol-2-yl)ethyl acetate



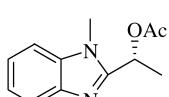
$[\alpha]_D = -13.5$ (*c* 1.1, CH₃OH)

Source of chirality: kinetic resolution

Absolute configuration: (S)



(*S*)-1-(1*H*-Benzimidazol-2-yl)ethanol



$[\alpha]_D = +63.6$ (*c* 1.0, CH₃OH)

Source of chirality: kinetic resolution

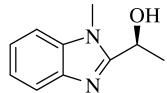
Absolute configuration: (R)



(*R*)-1-(1-Methyl-1*H*-benzo[d]imidazol-2-yl)ethyl acetate

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = -8.6$ (*c* 1.0, CH₃OH)

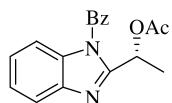
Source of chirality: kinetic resolution

Absolute configuration: (S)

C₁₀H₁₂N₂O
(*S*)-1-(1-Methyl-1*H*-benzo[*d*]imidazol-2-yl)ethanol

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = +27.8$ (*c* 1.0, CH₃OH)

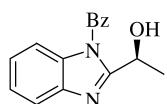
Source of chirality: kinetic resolution

Absolute configuration: (R)

C₁₈H₁₆N₂O₃
1-(1-Benzoyl-1*H*-benzo[*d*]imidazol-2-yl)-(1*R*)-ethyl acetate

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = -36.0$ (*c* 1.0, CH₃OH)

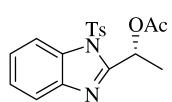
Source of chirality: kinetic resolution

Absolute configuration: (S)

C₁₆H₁₄N₂O₂
2-[1-Hydroxy-(1*S*)-ethyl]-1*H*-benzo[*d*]imidazol-1-yl-phenylmethanone

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = +23.4$ (*c* 0.9, CH₃OH)

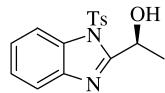
Source of chirality: kinetic resolution

Absolute configuration: (R)

C₁₈H₁₈N₂O₄S
(*R*)-1-(1-Tosyl-1*H*-benzo[*d*]imidazol-2-yl)ethyl acetate

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = -21.8$ (*c* 0.8, CH₃OH)

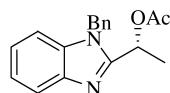
Source of chirality: kinetic resolution

Absolute configuration: (S)

C₁₆H₁₆N₂O₃S
(S)-1-(1-Tosyl-1*H*-benzo[*d*]imidazol-2-yl)ethanol

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = +12.2$ (*c* 0.8, CH₃OH)

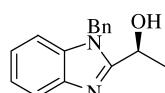
Source of chirality: kinetic resolution

Absolute configuration: (R)

C₁₈H₁₈N₂O₂
(R)-1-(1-Benzyl-1*H*-benzo[*d*]imidazol-2-yl)ethyl acetate

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = -15.1$ (*c* 0.9, CH₃OH)

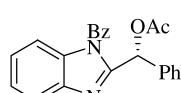
Source of chirality: kinetic resolution

Absolute configuration: (S)

C₁₆H₁₆N₂O
(S)-1-(1-Benzyl-1*H*-benzo[*d*]imidazol-2-yl)ethanol

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = +2.5$ (*c* 1.1, CH₃OH)

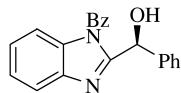
Source of chirality: kinetic resolution

Absolute configuration: (R)

C₂₃H₁₈N₂O₃
1-Benzoyl-1*H*-benzo[*d*]imidazol-2-yl(phenyl)methyl acetate

Ravi Kumar Cheedrala, Rachna Sachwani and
Palakodety Radha Krishna*

Tetrahedron: Asymmetry 19 (2008) 901



$[\alpha]_D = -6.6$ (*c* 1.3, CH₃OH)

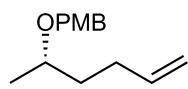
Source of chirality: kinetic resolution

Absolute configuration: (*S*)

C₂₁H₁₆N₂O₂
2-Hydroxy(phenyl)methyl-1*H*-benzo[*d*]imidazol-1-yl-phenylmethanone

Jian Liu, Ling Zhang, Jinmei He, Liuer He, Bowen Ma, Xinfu Pan and
Xuegong She*

Tetrahedron: Asymmetry 19 (2008) 906



$[\alpha]_D^{25} = +22$ (*c* 2.0, CHCl₃)

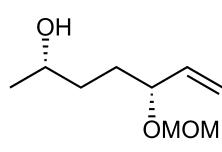
Source of chirality: (*S*)-propylene oxide

Absolute configuration: (*S*)

C₁₄H₂₀O₂
(*S*)-1-((Hex-5-en-2-yloxy)methyl)-4-methoxybenzene

Jian Liu, Ling Zhang, Jinmei He, Liuer He, Bowen Ma, Xinfu Pan and
Xuegong She*

Tetrahedron: Asymmetry 19 (2008) 906



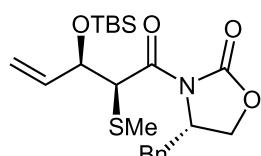
$[\alpha]_D^{25} = +13$ (*c* 0.3, CHCl₃)

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

C₉H₁₈O₃
(2*S*,5*R*)-5-(methoxymethoxy)hept-6-en-2-ol

Jian Liu, Ling Zhang, Jinmei He, Liuer He, Bowen Ma, Xinfu Pan and
Xuegong She*

Tetrahedron: Asymmetry 19 (2008) 906



Ee >98% [by chiral HPLC]

$[\alpha]_D^{25} = +28.6$ (*c* 3.45, CHCl₃)

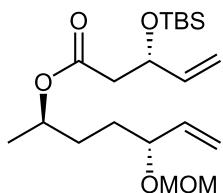
Source of chirality: Evans Aldol reaction

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

C₂₂H₃₃NO₄SSi
(*S*)-4-Benzyl-3-((2*S*,3*R*)-3-(tert-butyldimethylsilyloxy)-2-(methylthio)pent-4-enoyl)oxazolidin-2-one

Jian Liu, Ling Zhang, Jinmei He, Liuer He, Bowen Ma, Xinfu Pan and Xuegong She*

Tetrahedron: Asymmetry 19 (2008) 906



$[\alpha]_D^{25} = +39.6$ (*c* 4.0, CHCl₃)

Source of chirality: Mitsunobu reaction

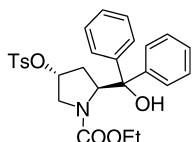
Absolute configuration: (S,2S,5R)

C₂₀H₃₈O₅Si

(*S*)-((2*R*,5*R*)-5-(Methoxymethoxy)hept-6-en-2-yl) 3-(*tert*-butyldimethylsilyloxy)pent-4-enoate

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao, Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = +46.5$ (*c* 1.0, CH₂Cl₂)

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

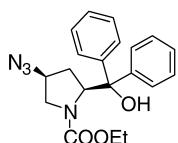
Source of chirality: *trans*-4-hydroxyl-L-proline

C₂₇H₂₉NO₆S

(2*S*,4*R*)-Ethyl 2-(hydroxydiphenylmethyl)-4-(tosyloxy)pyrrolidine-1-carboxylate

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao, Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = +87.6$ (*c* 1.2, CH₂Cl₂)

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

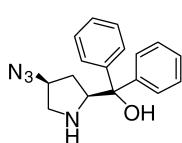
Source of chirality: *trans*-4-hydroxyl-L-proline

C₂₀H₂₂N₄O₃

(2*S*,4*S*)-Ethyl 4-azido-2-(hydroxydiphenylmethyl)pyrrolidine-1-carboxylate

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao, Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = -62.7$ (*c* 1.5, CH₂Cl₂)

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

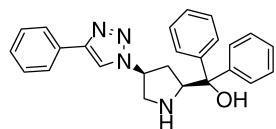
Source of chirality: *trans*-4-hydroxyl-L-proline

C₁₇H₁₈N₄O

((2*S*,4*S*)-4-Azidopyrrolidin-2-yl)diphenylmethanol

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao,
Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = -150.2$ (*c* 1.2, CH₂Cl₂)

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

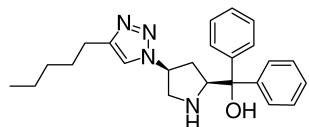
Source of chirality: *trans*-4-hydroxyl-L-proline

C₂₅H₂₄N₄O

Diphenyl((2*S*,4*S*)-4-(4-phenyl-1*H*-1,2,3-triazol-1-yl)pyrrolidin-2-yl)methanol

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao,
Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = -103.9$ (*c* 1.2, CH₂Cl₂)

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

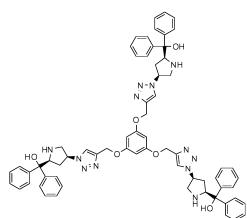
Source of chirality: *trans*-4-hydroxyl-L-proline

C₂₄H₃₀N₄O

((2*S*,4*S*)-4-(4-Pentyl-1*H*-1,2,3-triazol-1-yl)pyrrolidin-2-yl)diphenylmethanol

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao,
Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



$[\alpha]_D^{20} = -160.7$ (*c* 1.0, CH₂Cl₂)

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

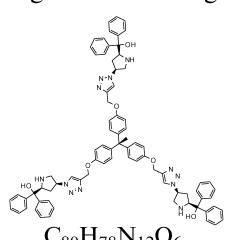
Source of chirality: *trans*-4-hydroxyl-L-proline

C₆₆H₆₆N₁₂O₆

(2*S*,2'*S*,2''*S*,4*S*,4'*S*,4''*S*)-4,4',4''-(Benzene-1,3,5-triyltris(oxy))tris(methylene)tris(1*H*-1,2,3-triazole-4,1-diyl))tris(pyrrolidine-4,2-diyl)tris(diphenylmethanol)

Yan-Ning Niu, Ze-Yi Yan, Gao-Qiang Li, Hai-Long Wei, Guo-Lin Gao,
Lu-Yong Wu and Yong-Min Liang*

Tetrahedron: Asymmetry 19 (2008) 912



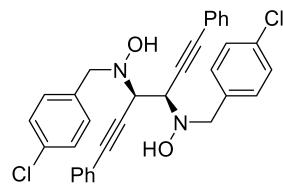
$[\alpha]_D^{20} = -92.1$ (*c* 1.0, CH₂Cl₂)

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

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

C₈₀H₇₈N₁₂O₆

(2*S*,2'*S*,2''*S*,4*S*,4'*S*,4''*S*)-4,4',4''-(4,4',4''-(4,4',4''-(Ethane-1,1,1-triyl)tris(benzene-4,1-diyl))tris(oxy)tris(methylene)tris(1*H*-1,2,3-triazole-4,1-diyl))tris(pyrrolidine-4,2-diyl)tris(diphenylmethanol)



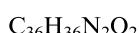
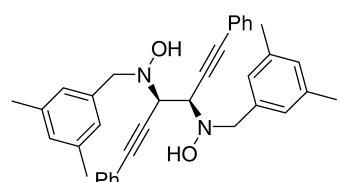
N,N'-(R,R)-1,6-Diphenylhexa-1,5-diyne-3,4-diyl]bis[N-(4-chlorobenzyl)hydroxylamine]

Ee = 11%

$[\alpha]_D^{25} = +5$ (*c* 0.488, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)



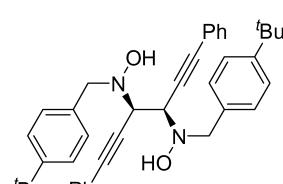
N,N'-(R,R)-1,6-Diphenylhexa-1,5-diyne-3,4-diyl]bis[N-(3,5-dimethylbenzyl)hydroxylamine]

Ee = 47%

$[\alpha]_D^{25} = +10$ (*c* 0.584, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)



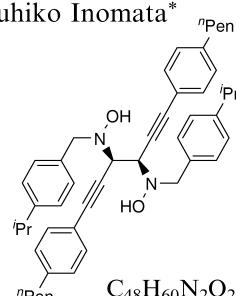
N,N'-(R,R)-1,6-Diphenylhexa-1,5-diyne-3,4-diyl]bis[N-(4-t-butylbenzyl)hydroxylamine]

Ee = 37%

$[\alpha]_D^{25} = +5$ (*c* 0.884, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)



N,N'-(R,R)-1,6-Bis(4-pentylphenyl)hexa-1,5-diyne-3,4-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]

Ee = 76%

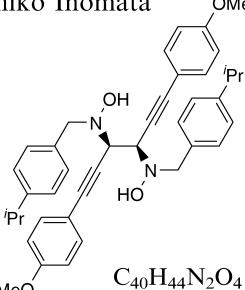
$[\alpha]_D^{25} = +13$ (*c* 0.892, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)

Masakazu Serizawa, Shuhei Fujinami, Yutaka Ukaji* and
Katsuhiko Inomata*

Tetrahedron: Asymmetry 19 (2008) 921



N,N'-(R,R)-1,6-Bis(4-methoxyphenyl)hexa-1,5-diyne-3,4-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]

Ee = 72%

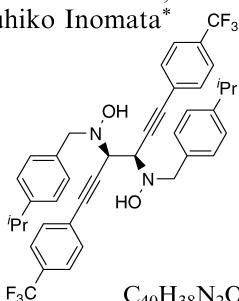
$[\alpha]_D^{25} = +12$ (*c* 0.788, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)

Masakazu Serizawa, Shuhei Fujinami, Yutaka Ukaji* and
Katsuhiko Inomata*

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N,N'-(R,R)-1,6-Bis[4-(trifluoromethyl)phenyl]hexa-1,5-diyne-3,4-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]

Ee = 59%

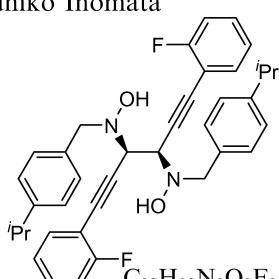
$[\alpha]_D^{25} = +9$ (*c* 0.912, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)

Masakazu Serizawa, Shuhei Fujinami, Yutaka Ukaji* and
Katsuhiko Inomata*

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N,N'-(R,R)-1,6-Bis(2-fluorophenyl)hexa-1,5-diyne-3,4-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]

Ee = 74%

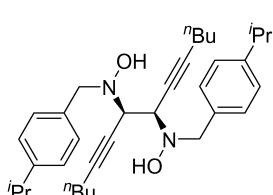
$[\alpha]_D^{25} = +11$ (*c* 0.948, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)

Masakazu Serizawa, Shuhei Fujinami, Yutaka Ukaji* and
Katsuhiko Inomata*

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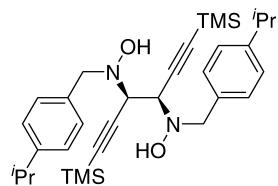
Ee = 79%

$[\alpha]_D^{25} = -10$ (*c* 0.248, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)

N,N'-(R,R)-Tetradeca-5,9-diyne-7,8-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]



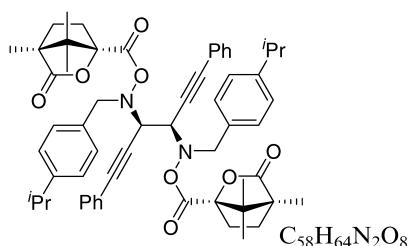
N,N'-(R,R)-1,6-Bis(trimethylsilyl)hexa-1,5-diyne-3,4-diyl]bis[N-(4-isopropylbenzyl)hydroxylamine]

Ee = 70%

$[\alpha]_D^{25} = -9$ (*c* 0.536, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate

Absolute configuration: (*R,R*)



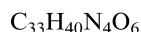
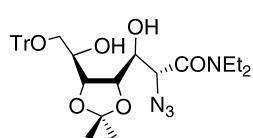
N,N'-(3R,4R)-1,6-Diphenylhexa-1,5-diyne-3,4-diyl]bis{N-(4-isopropylbenzyl)-O-[(1S',4R')-4,7,7-trimethyl-2-oxabicyclo[2.2.1]heptane-3-one-1-carbonyl]hydroxylamine}

Ee = 100%

$[\alpha]_D^{25} = +80$ (*c* 0.14, EtOH)

Source of chirality: dicyclohexyl (*R,R*)-tartrate,
(*1S,4R*)-camphanic chloride

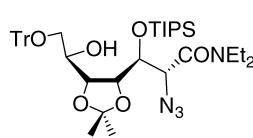
Absolute configuration: (3*R*,4*R*,1*S'*,4*R'*)



2-Azido-N,N-diethyl-4,5-O-isopropylidene-7-O-trityl-D-glycero-D-allo-heptonamide

$[\alpha]_D^{21} = -28$ (*c* 1.1, CHCl₃)

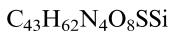
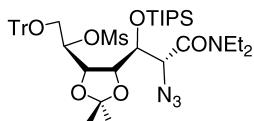
Source of chirality: D-ribose and stereoselective syntheses



2-Azido-N,N-diethyl-4,5-O-isopropylidene-3-O-triisopropylsilyl-7-O-trityl-D-glycero-D-allo-heptonamide

$[\alpha]_D^{22} = -10$ (*c* 0.3, CH₂Cl₂)

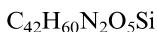
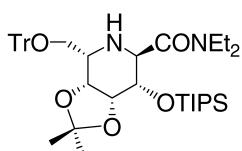
Source of chirality: D-ribose and stereoselective syntheses



2-Azido-*N,N*-diethyl-4,5-*O*-isopropylidene-6-*O*-mesyl-3-*O*-triisopropylsilyl-7-*O*-trityl-*D*-glycero-*D*-*allo*-heptonamide

$[\alpha]_D^{20} = +24$ (*c* 0.37, CH₂Cl₂)

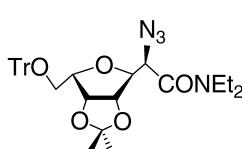
Source of chirality: D-ribose and stereoselective syntheses



N,N-Diethyl-2,6-dideoxy-2,6-imino-4,5-*O*-isopropylidene-7-*O*-trityl-*L*-glycero-*D*-*allo*-heptonamide

$[\alpha]_D^{22} = -10.5$ (*c* 0.26, CH₂Cl₂)

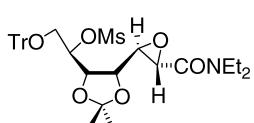
Source of chirality: D-ribose, stereoselective syntheses and stereospecific cyclization



3,6-Anhydro-2-azido-*N,N*-diethyl-4,5-*O*-isopropiliden-7-*O*-trityl-*L*-glicero-*D*-*allo*-heptonamide

$[\alpha]_D^{25} = +7.5$ (*c* 1.5, CHCl₃)

Source of chirality: D-ribose, stereoselective syntheses and stereospecific cyclization



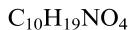
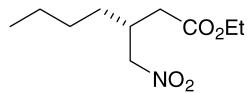
2,3-Anhydro-*N,N*-diethyl-4,5-*O*-isopropylidene-6-*O*-mesyl-7-*O*-trityl-*D*-glycero-*D*-*altro*-heptonamide

$[\alpha]_D^{20} = -6$ (*c* 1.01, CH₂Cl₂)

Source of chirality: D-ribose and stereoselective synthesis

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Ethyl (R)-(-)-3-nitromethylheptanoate

Ee >99%

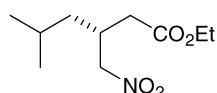
$[\alpha]_D^{25} = -7.0$ (*c* 0.35, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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Ethyl (R)-(-)-5-methyl-3-nitromethylhexanoate

Ee >99%

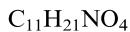
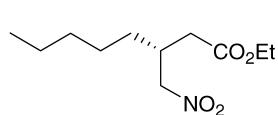
$[\alpha]_D = -6.5$ (*c* 0.95, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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Ethyl (R)-(-)-3-nitromethyloctanoate

Ee >99.9%

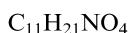
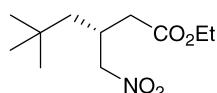
$[\alpha]_D = -8.8$ (*c* 0.25, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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Ethyl (R)-(-)-5,5-dimethyl-3-nitromethylhexanoate

Ee = 95%

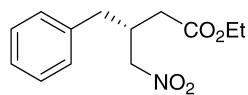
$[\alpha]_D = -6.8$ (*c* 0.5, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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Ethyl (*R*)(*-*)-3-nitromethyl-4-phenylbutanoate

Ee = 94%

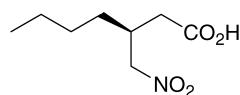
$[\alpha]_D = -11$ (*c* 0.7, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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(*S*)-(+)-3-Nitromethylheptanoic acid

Ee = 87%

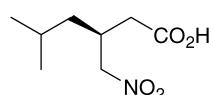
$[\alpha]_D = +9.2$ (*c* 0.5, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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(*S*)-(+)-4-Methyl-3-nitromethylhexanoic acid

Ee = 92%

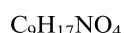
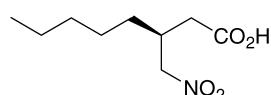
$[\alpha]_D = +6.0$ (*c* 1.0, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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(*S*)-(+)-3-Nitromethyloctanoic acid

Ee = 94%

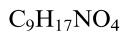
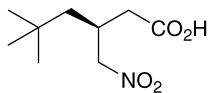
$[\alpha]_D = +11.4$ (*c* 0.5, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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(*S*)-(+)-5,5-Dimethyl-3-nitromethylhexanoic acid

Ee = 65%

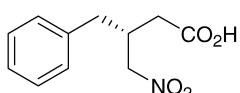
$[\alpha]_D = +4.0$ (*c* 0.1, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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(*R*)-(-)-3-Nitromethyl-4-phenylbutanoic acid

Ee = 94%

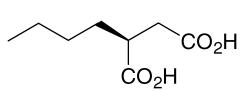
$[\alpha]_D = -11.0$ (*c* 0.7, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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(*S*)-(-)-2-Butylbutanedioic acid

Ee = 87%

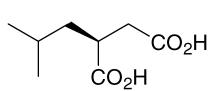
$[\alpha]_D = -24$ (*c* 0.85, EtOH)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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(*S*)-(-)-2-(2-Methylpropyl)butanedioic acid

Ee = 92%

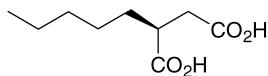
$[\alpha]_D = -24.0$ (*c* 1.0, EtOH)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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C₈H₁₆O₄
(S)-(-)-2-Pentylbutanedioic acid

Ee = 94%

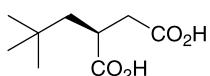
[α]_D = -22.1 (*c* 1.1, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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C₁₀H₁₈O₄
(S)-(-)-2-(2,2-Dimethyl)propylbutanedioic acid

Ee = 65%

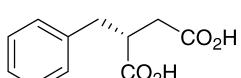
[α]_D = -12.0 (*c* 0.45, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*S*)

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C₁₁H₁₂O₄
(R)-(+)-2-(Phenylmethyl)butandioic acid

Ee = 94%

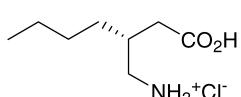
[α]_D = +24.0 (*c* 3.1, AcOEt)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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C₈H₁₈NO₂Cl
(R)-(-)-3-Aminomethylheptanoic acid hydrochloride

Ee >99%

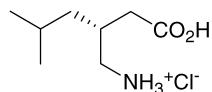
[α]_D = -5.0 (*c* 0.45, H₂O)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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C₈H₁₈NO₂Cl
(R)-(-)-3-Aminomethyl-5-methylhexanoic acid hydrochloride

Ee >99.9%

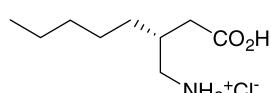
[α]_D = -10.5 (c 1, H₂O)

Source of chirality: enzymatic resolution

Absolute configuration: (3R)

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C₉H₂₀NO₂Cl
(R)-(-)-3-Aminomethyloctanoic acid hydrochloride

Ee >99%

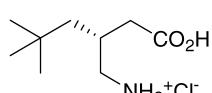
[α]_D = -3.3 (c 1, H₂O)

Source of chirality: enzymatic resolution

Absolute configuration: (3R)

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C₉H₂₀NO₂Cl
(R)-(-)-3-Aminomethyl-5,5-dimethylhexanoic acid hydrochloride

Ee = 95%

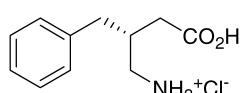
[α]_D = -9.7 (c 1, H₂O)

Source of chirality: enzymatic resolution

Absolute configuration: (3R)

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C₁₁H₁₆NO₂Cl
(R)-(-)-3-Aminomethyl-4-phenylbutanoic acid hydrochloride

Ee = 94%

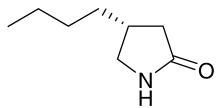
[α]_D = -6.4 (c 1.45, H₂O)

Source of chirality: enzymatic resolution

Absolute configuration: (3R)

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C₈H₁₄NO
(R)-(+)-4-Butyl-2-pyrrolidinone

Ee >99%

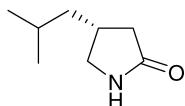
[α]_D = +4.0 (*c* 0.25, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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C₈H₁₄NO
(R)-(+)-4-Isobutyl-2-pyrrolidinone

Ee >99%

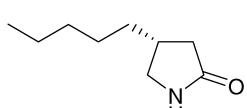
[α]_D = +2.1 (*c* 0.5, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

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C₉H₁₆NO
(R)-(+)-4-Pentyl-2-pyrrolidinone

Ee >99%

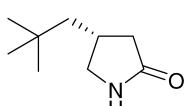
[α]_D = +3.1 (*c* 0.85, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

Fulvia Felluga,* Giuliana Pitacco, Ennio Valentin* and Cesare Daniele Venneri

Tetrahedron: Asymmetry 19 (2008) 945



C₉H₁₆NO
(R)-(-)-4-Neopentyl-2-pyrrolidinone

Ee = 95%

[α]_D = -7.2 (*c* 0.75, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)

Fulvia Felluga,* Giuliana Pitacco, Ennio Valentin* and Cesare Daniele Venneri

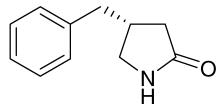
Tetrahedron: Asymmetry 19 (2008) 945

Ee = 94%

$[\alpha]_D = -5.1$ (*c* 0.5, MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: (3*R*)



C₁₁H₁₂NO

(*R*)-(−)-4-Benzyl-2-pyrrolidinone

Mariusz J. Bosiak, Marek P. Krzeminski, Parasuraman Jaisankar and Marek Zajdlewicz*

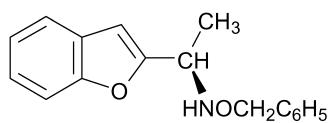
Tetrahedron: Asymmetry 19 (2008) 956

Ee = 92%

$[\alpha]_D^{20} = +46.6$ (*c* 1.77, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*), chemical correlation



C₁₇H₁₇NO₂

(*R*)-(+)-*N*-(1-(Benzofuran-2-yl)ethyl)-*O*-benzylhydroxylamine

Mariusz J. Bosiak, Marek P. Krzeminski, Parasuraman Jaisankar and Marek Zajdlewicz*

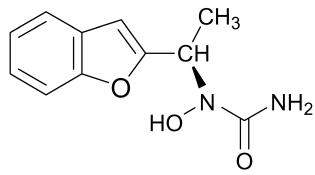
Tetrahedron: Asymmetry 19 (2008) 956

Ee = 99%

$[\alpha]_D^{20} = +14.4$ (*c* 0.42, DMSO)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*), chemical correlation



C₁₁H₁₂N₂O₃

(*R*)-(+)-N-1-(Benzofuran-2-yl)ethyl-*N*-hydroxyurea

Maciej Stodulski and Jacek Mlynarski*

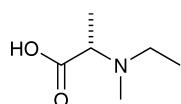
Tetrahedron: Asymmetry 19 (2008) 970

Ee = 100%

$[\alpha]_D^{19.8} = +5.0$ (*c* 0.50, EtOH)

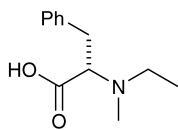
Source of chirality: L-alanine

Absolute configuration: (*S*)



C₆H₁₃NO₂

N-Ethyl-N-methyl-L-alanine

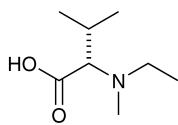


Ee = 100%

 $[\alpha]_D^{19.8} = +24.7$ (c 1.00, EtOH)

Source of chirality: L-phenylalanine

Absolute configuration: (S)

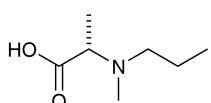
*N*-Ethyl-*N*-methyl-L-phenylalanine

Ee = 100%

 $[\alpha]_D^{18.9} = +17.9$ (c 0.10, EtOH)

Source of chirality: L-valine

Absolute configuration: (S)

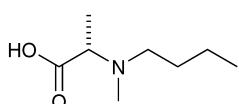
*N*-Ethyl-*N*-methyl-L-valine

Ee = 99%

 $[\alpha]_D^{20.3} = +3.2$ (c 0.25, EtOH)

Source of chirality: L-alanine

Absolute configuration: (S)

*N*-Methyl-*N*-propyl-L-alanine

Ee = 55%

 $[\alpha]_D^{19.8} = +3.2$ (c 0.50, EtOH)

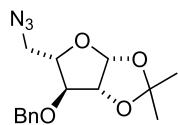
Source of chirality: L-alanine

Absolute configuration: (S)

*N*-Butyl-*N*-methyl-L-alanine

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and
George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -55.8$ (*c* 1.1, CHCl₃)

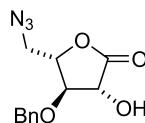
Source of chirality: L-arabinose as starting material



5-Azido-3-O-benzyl-5-deoxy-1,2-O-isopropylidene-β-L-arabinofuranose

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and
George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -158$ (*c* 1.16, CHCl₃)

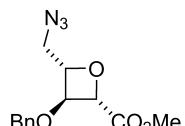
Source of chirality: L-arabinose as starting material



5-Azido-3-O-benzyl-5-deoxy-L-arabinono-1,4-lactone

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and
George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -169$ (*c* 1.25, CHCl₃)

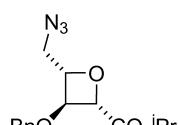
Source of chirality: L-arabinose as starting material



Methyl 2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribonate

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and
George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -160$ (*c* 1.5, CHCl₃)

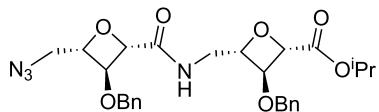
Source of chirality: L-arabinose as starting material



Isopropyl 2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribonate

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and George W. J. Fleet*

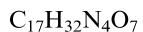
Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -87.7$ (*c* 0.71, CHCl₃)

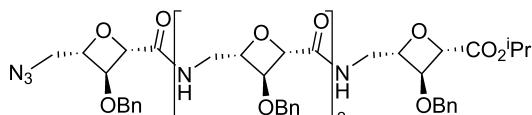
Source of chirality: L-arabinose as starting material



Isopropyl 2,4-anhydro-5-(2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido)-3-O-benzyl-5-deoxy-L-ribonate

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{22} = -176$ (*c* 0.2, CHCl₃)

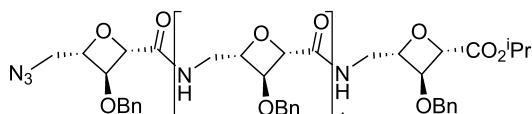
Source of chirality: L-arabinose as starting material



Isopropyl 2,4-anhydro-5-[2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)-2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)-2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)]-3-O-benzyl-5-deoxy-L-ribonate

Beatrice Lopez-Ortega, Sarah F. Jenkinson, Timothy D. W. Claridge and George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 976



Ee = 100%

$[\alpha]_D^{23} = -158$ (*c* 0.3, CHCl₃)

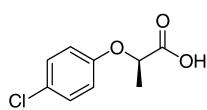
Source of chirality: L-arabinose as starting material



Isopropyl 2,4-anhydro-5-[2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)-2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)-2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)-2,4-anhydro-5-azido-3-O-benzyl-5-deoxy-L-ribononamido-(N→5)]-3-O-benzyl-5-deoxy-L-ribonate

Alessandra Ammazzalorso, Giancarlo Bettoni, Barbara De Filippis, Marialuigia Fantacuzzi, Letizia Giampietro, Antonella Giancristofaro, Cristina Maccallini, Nazzareno Re, Rosa Amoroso* and Cecilia Coletti

Tetrahedron: Asymmetry 19 (2008) 989



Ee = 98%

$[\alpha]_D = +41.9$ (*c* 1.2, CH₃OH)

Source of chirality: (S)-ethyl lactate

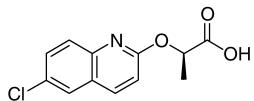
Absolute configuration: (R)



(R)-2-(4-Chlorophenoxy)propanoic acid

Alessandra Ammazzalorso, Giancarlo Bettoni, Barbara De Filippis,
Marialuigia Fantacuzzi, Letizia Giampietro, Antonella Giancristofaro,
Cristina Maccallini, Nazzareno Re, Rosa Amoroso* and Cecilia Coletti

Tetrahedron: Asymmetry 19 (2008) 989



$C_{12}H_{10}ClNO_3$
(*R*)-2-[(6-Chloroquinolin-2-yl)oxy]propanoic acid

Ee = 99%

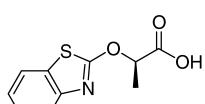
$[\alpha]_D = +110.7$ (*c* 2.0, CHCl₃)

Source of chirality: (*S*)-ethyl lactate

Absolute configuration: (*R*)

Alessandra Ammazzalorso, Giancarlo Bettoni, Barbara De Filippis,
Marialuigia Fantacuzzi, Letizia Giampietro, Antonella Giancristofaro,
Cristina Maccallini, Nazzareno Re, Rosa Amoroso* and Cecilia Coletti

Tetrahedron: Asymmetry 19 (2008) 989



$C_{10}H_9NO_3S$
(*R*)-2-(1,3-Benzothiazol-2-yloxy)propanoic acid

Ee = 98%

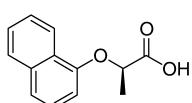
$[\alpha]_D = +35.9$ (*c* 2.0, CH₃OH)

Source of chirality: (*S*)-ethyl lactate

Absolute configuration: (*R*)

Alessandra Ammazzalorso, Giancarlo Bettoni, Barbara De Filippis,
Marialuigia Fantacuzzi, Letizia Giampietro, Antonella Giancristofaro,
Cristina Maccallini, Nazzareno Re, Rosa Amoroso* and Cecilia Coletti

Tetrahedron: Asymmetry 19 (2008) 989



$C_{13}H_{12}O_3$
(*R*)-2-(1-Naphthoxy)propanoic acid

Ee = 99%

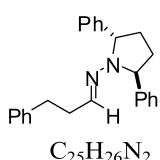
$[\alpha]_D = -61.3$ (*c* 1.8, CHCl₃)

Source of chirality: (*S*)-ethyl lactate

Absolute configuration: (*R*)

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora,
Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo,
Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



$C_{25}H_{26}N_2$
(*2S,5S*)-1-[(3-Phenyl)propylideneamine]-2,5-diphenylpyrrolidine

Ee = 100%

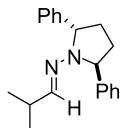
$[\alpha]_D^{20} = -163.9$ (*c* 1.4, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*S*,5*S*)

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



(2S,5S)-1-[(2-Methyl)propylideneamine]-2,5-diphenylpyrrolidine

Ee = 100%

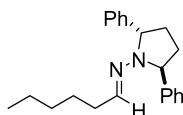
[α]_D²⁰ = -149.7 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,5S)

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



(2S,5S)-1-Hexylideneamine-2,5-diphenylpyrrolidine

Ee = 100%

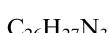
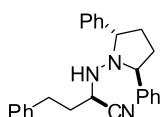
[α]_D²⁰ = -149.0 (c 1.0, CHCl₃)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,5S)

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



(R)-2-[(2S,5S)-2,5-Diphenylpyrrolidin-1-ylamino]-4-phenylbutanenitrile

Ee = 100%

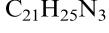
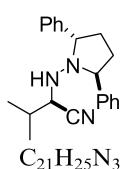
[α]_D²⁰ = -138.0 (c 1.0, CH₂Cl₂)

Source of chirality: asymmetric synthesis

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

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



(R)-2-[(2S,5S)-2,5-Diphenylpyrrolidin-1-ylamino]-3-methylbutanenitrile

Ee = 100%

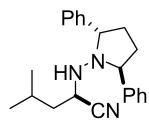
[α]_D²⁰ = -125.3 (c 1.1, CHCl₃)

Source of chirality: asymmetric synthesis

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

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



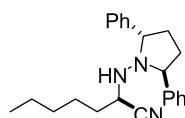
(R)-2-[(2S,5S)-2,5-Diphenylpyrrolidin-1-ylamino]-4-methylpentanenitrile

Ee = 100%

[α]_D²⁰ = -142.8 (c 1.5, CHCl₃)

Source of chirality: asymmetric synthesis

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



(R)-2-[(2S,5S)-2,5-Diphenylpyrrolidin-1-ylamino]heptanenitrile

Ee = 100%

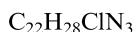
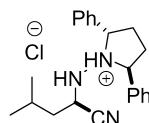
[α]_D²⁰ = -152.3 (c 1.1, CHCl₃)

Source of chirality: asymmetric synthesis

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

Abel Ros, Elena Díez, Eugenia Marqués-López, Eloísa Martín-Zamora, Juan Vázquez, Javier Iglesias-Sigüenza, Rafael R. Pappalardo, Eleuterio Alvarez, José M. Lassaletta* and Rosario Fernández*

Tetrahedron: Asymmetry 19 (2008) 998



(R)-2-[(2S,5S)-2,5-Diphenylpyrrolidin-1-ylamino]-4-methylpentanenitrile hydrochloride

Ee = 100%

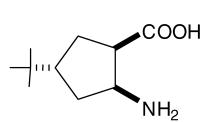
[α]_D²⁰ = -106.1 (c 1.2, CHCl₃)

Source of chirality: asymmetric synthesis

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

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry 19 (2008) 1005



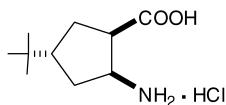
(1R,2S,4R)-2-Amino-4-tert-butylcyclopentanecarboxylic acid

Ee >99% by GC on a CP-Chirasil-Dex CB column after double derivatisation

[α]_D²⁵ = -6 (c 0.2, H₂O)

Source of chirality: Lipolase-catalysed enantioselective hydrolysis

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



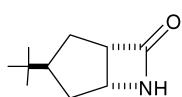
$C_{10}H_{20}ClNO_2$
(1*R*,2*S*,4*R*)-2-Amino-4-*tert*-butylcyclopentanecarboxylic acid hydrochloride

Ee >99% by GC on a CP-Chirasil-Dex CB column
after double derivatisation

$[\alpha]_D^{25} = -5$ (*c* 0.15, H₂O)

Source of chirality: Lipolase-catalysed enantioselective hydrolysis

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

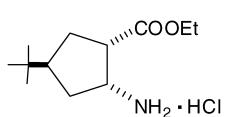


$C_{10}H_{17}NO$
(1*S*,3*S*,5*R*)-4-*tert*-Butyl-6-azabicyclo[3.2.0]heptan-7-one

Ee = 96% by GC on a CP-Chirasil-Dex CB column
 $[\alpha]_D^{25} = +54$ (*c* 0.25, EtOH)

Source of chirality: Lipolase-catalysed enantioselective hydrolysis

Absolute configuration: (1*S*,3*S*,5*R*)



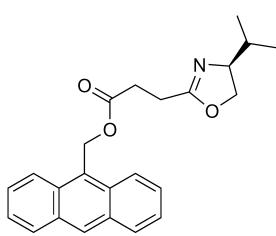
$C_{12}H_{24}ClNO_2$
Ethyl (1*S*,2*R*,4*S*)-2-amino-4-*tert*-butylcyclopentanecarboxylate hydrochloride

Ee = 95% by GC on a CP-Chirasil-Dex CB column
after derivatisation

$[\alpha]_D^{25} = +4$ (*c* 0.2, EtOH)

Source of chirality: Lipolase-catalysed enantioselective hydrolysis

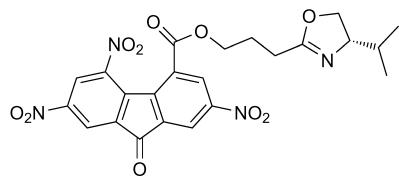
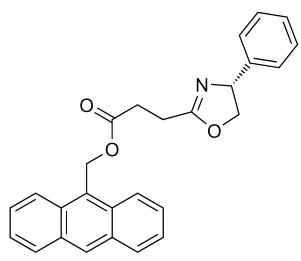
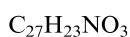
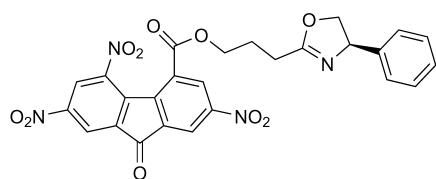
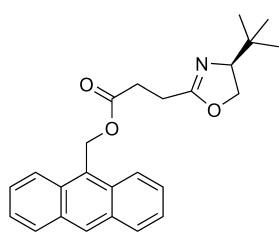
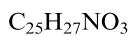
Absolute configuration: (1*S*,2*R*,4*S*)

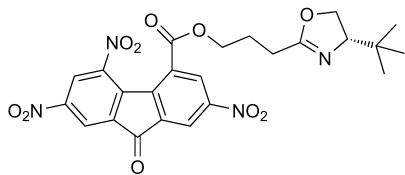


$C_{24}H_{25}NO_3$
(Anthracen-10-yl)methyl 3-((*S*)-4,5-dihydro-4-isopropylloxazol-2-yl)propanoate

$[\alpha]_{436}^{25} = -56$ (*c* 0.5, CHCl₃)

Absolute configuration (*S*) (assigned from (*S*)-valinol)


 $[\alpha]_{436}^{25} = -102$ (*c* 0.3, CHCl₃)
Absolute configuration (*S*) (assigned from (*S*)-valinol)(3-((*S*)-4,5-Dihydro-4-isopropoxyloxazol-2-yl)propyl 2,5,7-trinitro-9-oxo-9H-fluorene-4-carboxylate
 $[\alpha]_{436}^{25} = +24$ (*c* 0.6, CHCl₃)
Absolute configuration (*R*) (assigned from (*R*)-phenylglycinol)(Anthracen-10-yl)methyl 3-((*R*)-4,5-dihydro-4-phenyloxazol-2-yl)propanoate
 $[\alpha]_{589}^{25} = +33$ (*c* 0.4, CHCl₃)
Absolute configuration (*R*) (assigned from (*R*)-phenylglycinol)3-((*R*)-4,5-Dihydro-4-phenyloxazol-2-yl)propyl 2,5,7-trinitro-9-oxo-9H-fluorene-4-carboxylate
 $[\alpha]_{436}^{25} = -6$ (*c* 0.4, CHCl₃)
Absolute configuration (*S*) (assigned from (*S*)-*tert*-leucinol)(Anthracen-10-yl)methyl 3-((*S*)-4-tert-butyl-4,5-dihydrooxazol-2-yl)propanoate


 $[\alpha]_{D}^{25} = -74$ (*c* 0.5, CHCl₃)

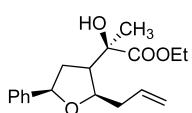
 Absolute configuration (*S*) (assigned from (*S*)-*tert*-leucinol)

 3-((*S*)-4-*tert*-Butyl-4,5-dihydrooxazol-2-yl)propyl 2,5,7-trinitro-9-oxo-9*H*-fluorene-4-carboxylate

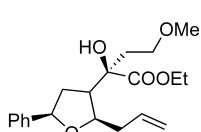
 $[\alpha]_{D}^{23} = -66$ (*c* 1.05, CHCl₃)

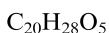
 Absolute configuration: (*R*)


(R)-2-Phenyl-2,3-dihydrofuran


 $[\alpha]_{D}^{23} = +15.7$ (*c* 1.3, CHCl₃)

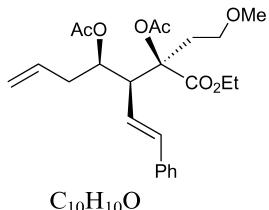
 Absolute configuration: (2*R*,3*R*,5*R*)

 (R)-Ethyl2-((2*R*,3*R*,5*R*)-2-allyl-5-phenyltetrahydrofuran-3-yl)-2-hydroxypropanoate

 $[\alpha]_{D}^{25} = -15.3$ (*c* 1.2, CHCl₃)

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

 (S)-Ethyl2-((2*R*,3*S*,5*R*)-2-allyl-5-phenyltetrahydrofuran-3-yl)-2-hydroxy-4-methoxybutanoate

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Khriesto Shurrush

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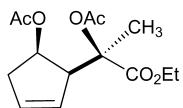


C₁₀H₁₀O
(3R,4S,5R)-3-(Ethoxycarbonyl)-1-methoxy-4-styryloct-7-ene-3,5-diacetate

[α]_D²³ = +44.9 (c 1.0, CHCl₃)
Absolute configuration: (3R,4S,5R)

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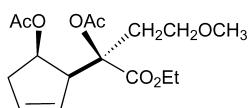


C₁₄H₂₀O₆
(R)-Ethyl 2-acetoxy-2-((1S,5R)-5-acetoxyxyclopent-2-enyl)propanoate

[α]_D²³ = -3.5 (c 1.0, CHCl₃)
Absolute configuration: (R,1S,5R)

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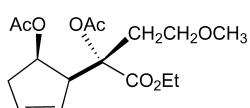


C₁₆H₂₄O₇
(R)-Ethyl 2-acetoxy-2-((1S,5R)-5-acetoxyxyclopent-2-enyl)-4-methoxybutanoate

[α]_D²³ = -3.2 (c 1.0, CHCl₃)
Absolute configuration: (R,1S,5R)

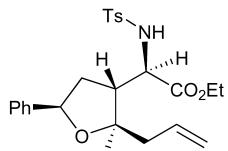
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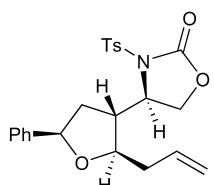
C₁₀H₁₀O
(S)-Ethyl 2-acetoxy-2-((1S,5R)-5-acetoxyxyclopent-2-enyl)-4-methoxybutanoate

[α]_D²³ = -5.5 (c 1.0, CHCl₃)
Absolute configuration: (S,1S,5R)



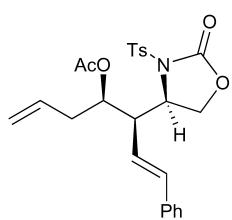
C₂₄H₂₉NO₅S
(R)-Ethyl 2-((2R,3R,5R)-2-allyl-5-phenyltetrahydrofuran-3-yl)-2-(4-methylphenylsulfonamido)acetate

[α]_D²³ = -11.8 (c 0.9, CHCl₃)
Absolute configuration: (R,2R,3R,5R)



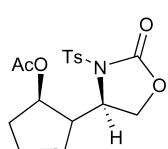
C₂₃H₂₅NO₅S
(S)-4-((2R,3R,5R)-2-Allyl-5-phenyltetrahydrofuran-3-yl)-3-tosyloxazolidin-2-one

[α]_D²³ = -32.5 (c 1.6, CHCl₃)
Absolute configuration: (S,2R,3R,5R)



C₂₅H₂₇NO₆S
(3R,4R)-3-(2-Oxo-3-tosyloxazolidin-4-yl)-1-phenylhepta-1,6-diene-4-yl acetate

[α]_D²³ = +41.4 (c 1.05, CHCl₃)
Absolute configuration: (3R,4R)



C₁₇H₁₉NO₆S
(1R,2R)-2-((R)-2-Oxo-3-tosyloxazolidin-4-yl)cyclopent-3-enyl acetate

[α]_D²³ = -87.4 (c 0.85, CHCl₃)
Absolute configuration: (1R,2R,R)