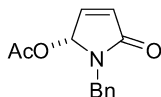


Sho Yamashita, Nobuyuki Mase, Kunihiro Takabe *

Tetrahedron: Asymmetry 19 (2008) 2115



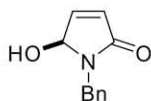
$C_{13}H_{13}NO_3$

(*R*)-1-Benzyl-5-oxo-2,5-dihydro-1*H*-pyrrol-2-yl acetate

Ee = >99% (chiral HPLC)
 $[\alpha]_D^{27} = -44.7$ (c 0.97, $CHCl_3$)
 Source of chirality: enzymatic resolution
 Absolute configuration: (*R*)

Sho Yamashita, Nobuyuki Mase, Kunihiro Takabe *

Tetrahedron: Asymmetry 19 (2008) 2115



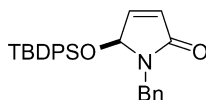
$C_{11}H_{11}NO_2$

(*S*)-1-Benzyl-5-hydroxy-1*H*-pyrrol-2(5*H*)-one

Ee = >99% (chiral HPLC)
 $[\alpha]_D^{27} = -35.0$ (c 1.08, $CHCl_3$)
 Source of chirality: enzymatic resolution
 Absolute configuration: (*S*)

Sho Yamashita, Nobuyuki Mase, Kunihiro Takabe *

Tetrahedron: Asymmetry 19 (2008) 2115



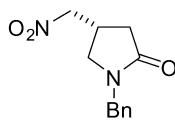
$C_{27}H_{29}NO_2Si$

(*S*)-1-Benzyl-5-(*tert*-butyldiphenylsilyloxy)-1*H*-pyrrol-2(5*H*)-one

Ee = >99% (chiral HPLC)
 $[\alpha]_D^{25} = +15.5$ (c 1.00, $CHCl_3$)
 Source of chirality: asymmetric synthesis
 Absolute configuration: (*S*)

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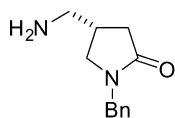
$C_{12}H_{14}N_2O_3$

(*R*)-1-Benzyl-4-(nitromethyl)pyrrolidin-2-one

Ee = >99% (chiral HPLC)
 $[\alpha]_D^{29} = +13.7$ (c 0.50, MeOH)
 Source of chirality: asymmetric synthesis
 Absolute configuration: (*R*)

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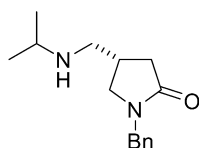
$C_{12}H_{16}N_2O$

(*S*)-Nebracetam ((*S*)-4-(aminomethyl)-1-benzylpyrrolidin-2-one)

$[\alpha]_D^{26} = -8.0$ (c 1.00, H₂O)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

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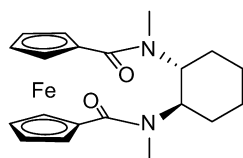
$C_{15}H_{22}N_2O$

(*S*)-1-Benzyl-4-((isopropylamino)methyl)pyrrolidin-2-one

$[\alpha]_D^{30} = -7.5$ (c 1.01, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Georgi Stavrakov, Svetlana Simova, Vladimir Dimitrov *

Tetrahedron: Asymmetry 19 (2008) 2119



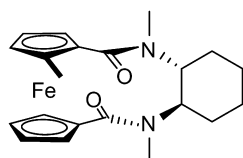
$C_{20}H_{24}FeN_2O_2$

(*R,R*)-1,1'-[*N,N'*-(1,2-Cyclohexane-1,2-diyl)bis(*N*-methylcarboxamide)]ferrocene

Ee = 98%
 $[\alpha]_D = +128.4$ (c 0.43, CHCl₃)
Source of chirality: (*R,R*)-1,2-diaminocyclohexane (98% ee)
Absolute configuration: (*R,R*)

Georgi Stavrakov, Svetlana Simova, Vladimir Dimitrov *

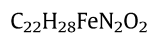
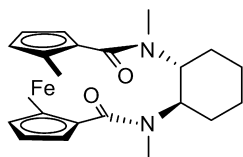
Tetrahedron: Asymmetry 19 (2008) 2119



$C_{21}H_{26}FeN_2O_2$

(*R,R,R_p*)-1,1'-[*N,N'*-(1,2-Cyclohexane-1,2-diyl)bis(*N*-methylcarboxamide)]2-methylferrocene

De >98.5% (NMR)
 $[\alpha]_D = +0.7$ (c 1.03, CHCl₃)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R,R,R_p*)



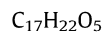
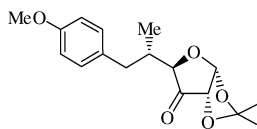
(*R,R,R_p,R_p*)-1,1'-[*N,N'*-(1,2-Cyclohexane-1,2-diyl)bis(*N*-methylcarboxamide)]2,2'-dimethylferrocene

De >98.5% (NMR)

$[\alpha]_D = -10.5$ (c 0.14, CHCl_3)

Source of chirality: asymmetric synthesis

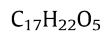
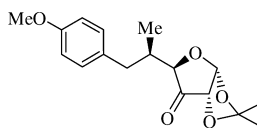
Absolute configuration: (*R,R,R_p,R_p*)



(3'*R*,5*R*,6'*S*)-5-((*S*)-1-(4-Methoxyphenyl)propan-2-yl)-2,2-dimethylfuro[3,2-*d*][1,3]dioxol-6(3'*H*,5*H*,6'*H*)-one

$[\alpha]_D^{25} = +153.3$ (c 1, CHCl_3)

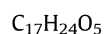
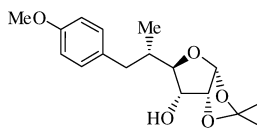
Absolute configuration: (3'*R*,5*R*,6'*S*,*S*)



(3'*R*,5*R*,6'*S*)-5-((*R*)-1-(4-Methoxyphenyl)propan-2-yl)-2,2-dimethylfuro[3,2-*d*][1,3]dioxol-6(3'*H*,5*H*,6'*H*)-one

$[\alpha]_D^{25} = +109.9$ (c 1.8, CHCl_3)

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



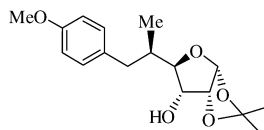
(3'*R*,5*R*,6*R*,6'*R*)-5-((*S*)-1-(4-Methoxyphenyl)propan-2-yl)-2,2-dimethyl-tetrahydrofuro[3,2-*d*][1,3]dioxol-6-ol

$[\alpha]_D^{25} = +48.4$ (c 1, CHCl_3)

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

Debendra K. Mohapatra,* Gokarneswar Sahoo, Kuppusamy Sankar, Mukund K. Gurjar

Tetrahedron: Asymmetry 19 (2008) 2123



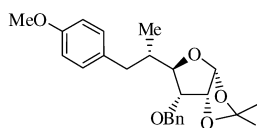
$C_{17}H_{24}O_5$

(3'R,5R,6R,6'R)-5-((R)-1-(4-Methoxyphenyl)propan-2-yl)-2,2-dimethyl-tetrahydrofuro[3,2-d][1,3]dioxol-6-ol

$[\alpha]_D^{25} = +37.7$ (c 1.1, $CHCl_3$)
Absolute configuration: (3'R,5R,6R,6'R,R)

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Tetrahedron: Asymmetry 19 (2008) 2123



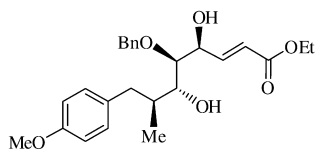
$C_{24}H_{30}O_5$

(3'R,5R,6R,6'R)-6-(Benzyloxy)-5-((S)-1-(4-methoxyphenyl)propan-2-yl)-2,2-dimethyl-tetrahydrofuro[3,2-d][1,3]dioxole

$[\alpha]_D^{25} = +72.4$ (c 1, $CHCl_3$)
Absolute configuration: (3'R,5R,6R,6'R,S)

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Tetrahedron: Asymmetry 19 (2008) 2123



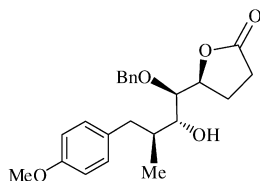
$C_{25}H_{32}O_6$

(4S,5R,6R,7S,E)-Ethyl 5-(benzyloxy)-4,6-dihydroxy-8-(4-methoxyphenyl)-7-methyloct-2-enoate

$[\alpha]_D^{25} = +14.9$ (c 3.3, MeOH)
Absolute configuration: (4S,5R,6R,7S)

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Tetrahedron: Asymmetry 19 (2008) 2123



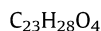
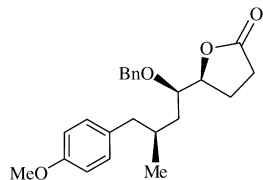
$C_{23}H_{28}O_5$

(S)-5-((1R,2R,3S)-1-(Benzyloxy)-2-hydroxy-4-(4-methoxyphenyl)-3-methylbutyl)-dihydrofuran-2(3H)-one

$[\alpha]_D^{25} = -4.8$ (c 3.6, MeOH)
Absolute configuration: (S,1R,2R,3S)

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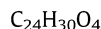
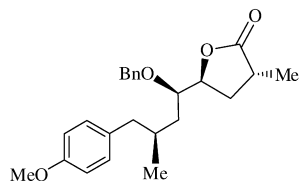


(S)-5-((1R,3S)-1-(Benzyloxy)-4-(4-methoxyphenyl)-3-methylbutyl)-dihydrofuran-2(3H)-one

$[\alpha]_D^{25} = +7.5$ (c 1.25, MeOH)
Absolute configuration: (S,1R,3S)

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Tetrahedron: Asymmetry 19 (2008) 2123

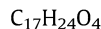
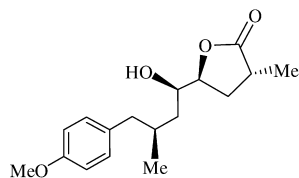


(3R,5S)-5-((1R,3S)-1-(Benzyloxy)-4-(4-methoxyphenyl)-3-methylbutyl)-3-methyl-dihydrofuran-2(3H)-one

$[\alpha]_D^{25} = +13.3$ (c 1, MeOH)
Absolute configuration: (3R,5S,1R,3S)

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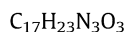
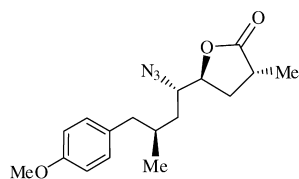


(3R,5S)-5-((1R,3S)-1-Hydroxy-4-(4-methoxyphenyl)-3-methylbutyl)-3-methyl-dihydrofuran-2(3H)-one

$[\alpha]_D^{25} = +38.0$ (c 1.1, $CHCl_3$)
Absolute configuration: (3R,5S,1R,3S)

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Tetrahedron: Asymmetry 19 (2008) 2123

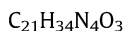
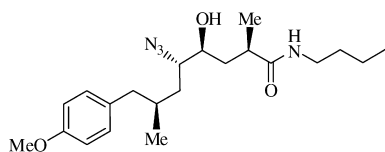


(3R,5S)-5-((1S,3S)-1-Azido-4-(4-methoxyphenyl)-3-methylbutyl)-3-methyl-dihydrofuran-2(3H)-one

$[\alpha]_D^{25} = +53.6$ (c 1, $CHCl_3$)
Absolute configuration: (3R,5S,1S,3S)

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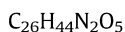
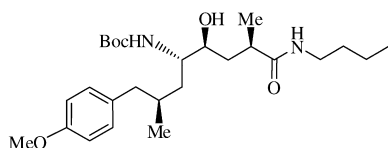


(2R,4S,5S,7S)-5-Azido-N-butyl-4-hydroxy-8-(4-methoxyphenyl)-2,7-dimethyloctanamide

$[\alpha]_D^{25} = -10.5$ (c 1, $CHCl_3$)
Absolute configuration: (2R,4S,5S,7S)

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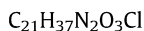
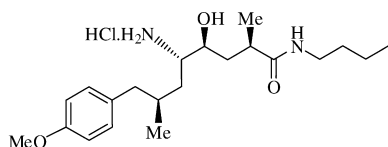


tert-Butyl (2S,4S,5S,7R)-8-(butylamino)-5-hydroxy-1-(4-methoxyphenyl)-2,7-dimethyl-8-oxooctan-4-ylcarbamate

$[\alpha]_D^{25} = -17.6$ (c 1, $CHCl_3$)
Absolute configuration: (2S,4S,5S,7R)

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Tetrahedron: Asymmetry 19 (2008) 2123

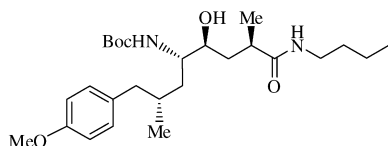


(2R,4S,5S,7S)-5-Amino-N-butyl-4-hydroxy-8-(4-methoxyphenyl)-2,7-dimethyloctanamide hydrochloride salt

$[\alpha]_D^{25} = +6.2$ (c 0.5, H_2O)
Absolute configuration: (2R,4S,5S,7S)

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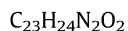
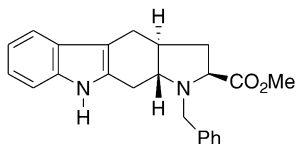


tert-Butyl (2R,4S,5S,7R)-8-(butylamino)-5-hydroxy-1-(4-methoxyphenyl)-2,7-dimethyl-8-oxooctan-4-ylcarbamate

$[\alpha]_D^{25} = -17.9$ (c 0.3, $CHCl_3$)
Absolute configuration: (2R,4S,5S,7R)

Mar Borregán, Ben Bradshaw, Nativitat Valls, Josep Bonjoch *

Tetrahedron: Asymmetry 19 (2008) 2130

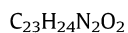
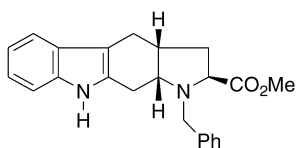


(2S,3aS,10aR)-1-Benzyl-2-methoxycarbonyl-1,2,3,3a,4,9,10,10a-octahydropyrrolo[2,3-*b*]carbazole

$[\alpha]_D^{22} = -102$ (c 1.25, $CHCl_3$)
Source of chirality: L-tyrosine
Absolute configuration: (2S,3aS,10aR)

Mar Borregán, Ben Bradshaw, Nativitat Valls, Josep Bonjoch *

Tetrahedron: Asymmetry 19 (2008) 2130

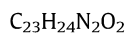
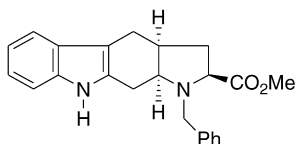


(2S,3aR,10aR)-1-Benzyl-2-methoxycarbonyl-1,2,3,3a,4,9,10,10a-octahydropyrrolo[2,3-*b*]carbazole

$[\alpha]_D^{22} = -129$ (c 2.14, $CHCl_3$)
Source of chirality: L-tyrosine
Absolute configuration: (2S,3aR,10aR)

Mar Borregán, Ben Bradshaw, Nativitat Valls, Josep Bonjoch *

Tetrahedron: Asymmetry 19 (2008) 2130

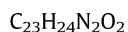
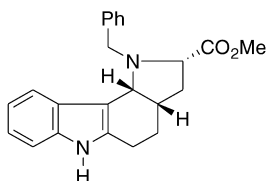


(2S,3aS,10aS)-1-Benzyl-2-methoxycarbonyl-1,2,3,3a,4,9,10,10a-octahydropyrrolo[2,3-*b*]carbazole

$[\alpha]_D^{22} = 3$ (c 0.5, $CHCl_3$)
Source of chirality: L-tyrosine
Absolute configuration: (2S,3aS,10aS)

Mar Borregán, Ben Bradshaw, Nativitat Valls, Josep Bonjoch *

Tetrahedron: Asymmetry 19 (2008) 2130

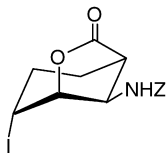


(2S,3aS,10cR)-1-Benzyl-2-methoxycarbonyl-1,2,3,3a,4,5,6,10c-octahydropyrrolo[3,2-*c*]carbazole

$[\alpha]_D^{22} = -13$ (c 1.4, $CHCl_3$)
Source of chirality: L-tyrosine
Absolute configuration: (2S,3aS,10cR)

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

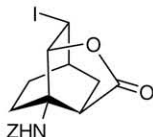


De = 99%
[α]_D = +57 (c 0.8, CH₂Cl₂)
Absolute configuration: (1*R*,4*R*,5*R*,8*R*)

8-(Benzyloxycarbonylamino)-2-iodo-6-oxabicyclo[3.2.1]octen-7-one

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

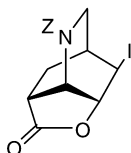


De = 99%
[α]_D = -55 (c 0.9, CH₂Cl₂)
Absolute configuration: (1*R*,2*R*,3*R*,6*R*,7*R*)

7-(Benzyloxycarbonylamino)-2-iodo-4-oxa-8-tricyclo[4.3.1.0^{3,7}]decan-5-one

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

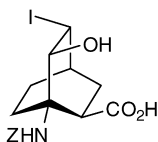


De = 99%
[α]_D = +43 (c 1.0, CH₂Cl₂)
Absolute configuration: (1*S*,2*R*,3*R*,6*R*,7*S*)

8-(Benzyloxycarbonyl)-2-iodo-4-oxa-8-azatricyclo[4.3.1.0^{3,7}]decan-5-one

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

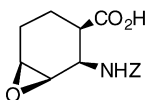


De = 99%
[α]_D = -30 (c 0.8, CH₂Cl₂)
Absolute configuration: (1*R*,2*R*,3*R*,4*R*,6*R*)

1-(Benzyloxycarbonylamino)-2-hydroxy-3-iodobicyclo[2.2.2]octane-6-carboxylic acid

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

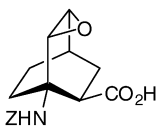


De = 99%
 $[\alpha]_D = +71$ (c 0.7, EtOH)
 Absolute configuration: (1R,2R,3R,4S)

8-(Benzyloxycarbonylamino)-3,4-epoxycyclohexane-1-carboxylic acid

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

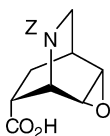


De = 99%
 $[\alpha]_D = -47$ (c 0.5, CH₂Cl₂)
 Absolute configuration: (1R,2R,3S,4R,6R)

1-(Benzyloxycarbonylamino)-2,3-epoxybicyclo[2.2.2]octane-6-carboxylic acid

Olivier Songis, Claude Didierjean, Jean Martinez, Monique Calmès *

Tetrahedron: Asymmetry 19 (2008) 2135

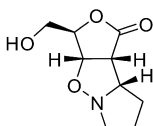


De = 99%
 $[\alpha]_D = -104$ (c 1.2, EtOH)
 Absolute configuration: (1S,4S,5S,6R,7R)

2-(Benzyloxycarbonyl)-2-azabicyclo[2.2.2]oct-5-ene-7-carboxylic acid

Sebastian Stecko, Konrad Paśniczek, Carine Michel, Anne Milet, Serge Perez, Marek Chmielewski *

Tetrahedron: Asymmetry 19 (2008) 2140



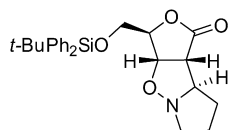
C₉H₁₃NO₄

(1aS,2R,4aR,4bS)-2-Hydroxymethyl-hexahydrofuro[3,4-d]pyrrolo[1,2-b]isoxazol-4(3H)-one

$[\alpha]_D^{25} = -67.4$ (c 0.6, CH₂Cl₂)
 Source of chirality: asymmetric synthesis
 Absolute configuration: (1aS,2R,4aR,4bS)

Sebastian Stecko, Konrad Pańniczek, Carine Michel, Anne Milet, Serge Perez, Marek Chmielewski *

Tetrahedron: Asymmetry 19 (2008) 2140



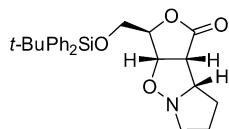
$C_{25}H_{31}NO_4Si$

(1aS,2R,4aR,4bR)-2-(*tert*-Butyldiphenylsilyloxymethyl)-hexahydrofuro[3,4-*d*]pyrrolo[1,2-*b*]isoxazol-4(3H)-one

$[\alpha]_D^{25} = +37.5$ (c 1.2, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (1aS,2R,4aR,4bR)

Sebastian Stecko, Konrad Pańniczek, Carine Michel, Anne Milet, Serge Perez, Marek Chmielewski *

Tetrahedron: Asymmetry 19 (2008) 2140



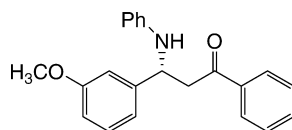
$C_{25}H_{31}NO_4Si$

(1aS,2R,4aR,4bS)-2-(*tert*-Butyldiphenylsilyloxymethyl)-hexahydrofuro[3,4-*d*]pyrrolo[1,2-*b*]isoxazol-4(3H)-one

$[\alpha]_D^{25} = -37.7$ (c 1.06, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (1aS,2R,4aR,4bS)

Arrigo Scettri *, Antonio Massa, Laura Palombi, Rosaria Villano, Maria Rosaria Acocella *

Tetrahedron: Asymmetry 19 (2008) 2149



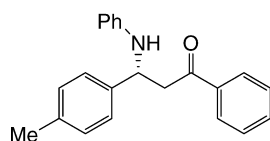
$C_{22}H_{21}NO_2$

(*R*)-3-(3-Methoxyphenyl)-1-phenyl-3-(phenylamino)propan-1-one

Ee = 40%
 $[\alpha]_D^{32} = -12.5$ (c 0.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3R)

Arrigo Scettri *, Antonio Massa, Laura Palombi, Rosaria Villano, Maria Rosaria Acocella *

Tetrahedron: Asymmetry 19 (2008) 2149



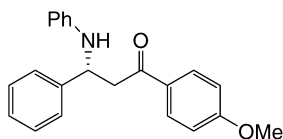
$C_{22}H_{21}NO$

(*R*)-1-Phenyl-3-(phenylamino)-3-*p*-tolylpropan-1-one

Ee = 42%
 $[\alpha]_D^{32} = +3.9$ (c 0.5, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3R)

Arrigo Scettri *, Antonio Massa, Laura Palombi, Rosaria Villano,
Maria Rosaria Acocella *

Tetrahedron: Asymmetry 19 (2008) 2149



$C_{22}H_{21}NO_2$

(R)-1-(4-Methoxyphenyl)-3-phenyl-3-(phenylamino)propan-1-one

Ee = 49%

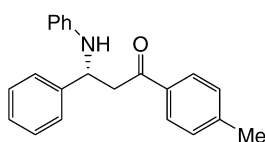
$[\alpha]_D^{32} = -5.7$ (c 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R)

Arrigo Scettri *, Antonio Massa, Laura Palombi, Rosaria Villano,
Maria Rosaria Acocella *

Tetrahedron: Asymmetry 19 (2008) 2149



$C_{22}H_{21}NO_2$

(R)-3-Phenyl-3-(phenylamino)-1-p-tolylpropan-1-one

Ee = 52%

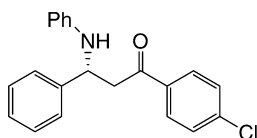
$[\alpha]_D^{32} = -16.0$ (c 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R)

Arrigo Scettri *, Antonio Massa, Laura Palombi, Rosaria Villano,
Maria Rosaria Acocella *

Tetrahedron: Asymmetry 19 (2008) 2149



$C_{21}H_{18}ClNO$

(R)-1-(4-Chlorophenyl)-3-phenyl-3-(phenylamino)propan-1-one

Ee = 31%

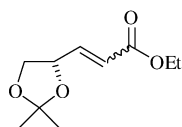
$[\alpha]_D^{32} = -5.8$ (c 0.55, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao, B. Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153



$C_{10}H_{16}O_4$

(S,E/Z)-Methyl 3-(2,2-dimethyl-1,3-dioxolan-4-yl)acrylate

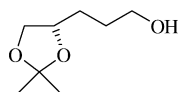
$[\alpha]_D^{25} = +4.3$ (c 1.8, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (3S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

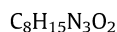
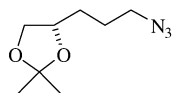


(S)-3-(2,2-Dimethyl-1,3-dioxolan-4-yl)propan-1-ol

$[\alpha]_D^{25} = +7.4$ (c 1.3, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (3S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

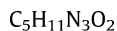
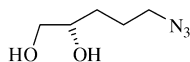


(S)-4-(3-Azidopropyl)-2,2-dimethyl-1,3-dioxolane

$[\alpha]_D^{25} = +6.5$ (c 1.5, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

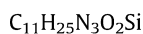
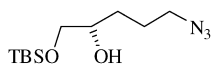


(S)-5-Azidopentane-1,2-diol

$[\alpha]_D^{25} = -7.4$ (c 1.2, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153



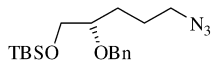
(S)-5-Azido-1-(tert-butyldimethylsilyloxy)pentan-2-ol

$[\alpha]_D^{25} = +1.1$ (c 1.0, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2S)

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Tetrahedron: Asymmetry 19 (2008) 2153

$[\alpha]_D^{25} = -21.6$ (c 2.1, CHCl₃)
Source of chirality: D-mannitol
Absolute configuration: (2S)



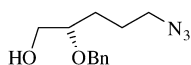
C₁₈H₃₁N₃O₂Si

(S)-5-Azido-2-(benzyloxy)pentyl(tert-butyl)dimethylsilane

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Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

$[\alpha]_D^{25} = -5.0$ (c .9, CHCl₃)
Source of chirality: D-mannitol
Absolute configuration: (2S)



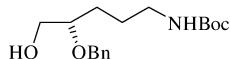
C₁₂H₁₇N₃O₂

(S)-5-Azido-2-(benzyloxy)pentan-1-ol

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

$[\alpha]_D^{25} = -13.2$ (c .8, CHCl₃)
Source of chirality: D-mannitol
Absolute configuration: (2S)



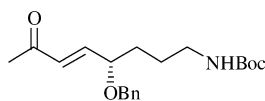
C₁₇H₂₇NO₄

(S)-tert-Butyl 4-(benzyloxy)-5-hydroxypentylcarbamate

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

$[\alpha]_D^{25} = -15.2$ (c 1.2, CHCl₃)
Source of chirality: D-mannitol
Absolute configuration: (4S)

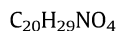
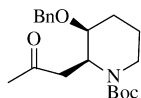


C₂₀H₂₉NO₄

(S,E)-tert-Butyl 4-(benzyloxy)-7-oxooct-5-enylcarbamate

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

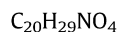
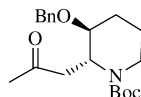


(2S,3S)-tert-Butyl 3-(benzyloxy)-2-(2-oxopropyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = +22.0$ (c 1.7, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2S,3S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

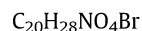
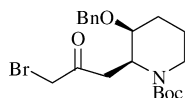


(2R,3S)-tert-Butyl 3-(benzyloxy)-2-(2-oxopropyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = -42.3$ (c 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2R,3S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

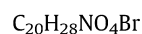
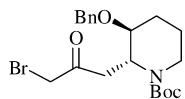


(2S,3S)-tert-Butyl 3-(benzyloxy)-2-(3-bromo-2-oxopropyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = -19.3$ (c 0.7, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2S,3S)

Neela Sudhakar, Gannaju Srinivasulu, Ganipiseti Srinivas Rao,
Batchu Venkateswara Rao *

Tetrahedron: Asymmetry 19 (2008) 2153

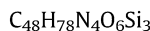
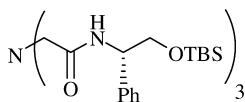


(2R,3S)-tert-Butyl 3-(benzyloxy)-2-(3-bromo-2-oxopropyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = -32.2$ (c 0.5, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2R,3S)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-phenylethyl)]nitrilotriacetamide

Ee = 100%

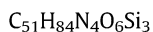
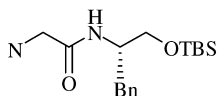
$[\alpha]_{\text{D}}^{25} = +30.0$ (c 0.50, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-benzylethyl)]nitrilotriacetamide

Ee = 100%

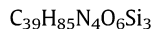
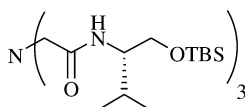
$[\alpha]_{\text{D}}^{25} = +74.4$ (c 0.67, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-iso-propylethyl)]nitrilotriacetamide

Ee = 100%

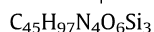
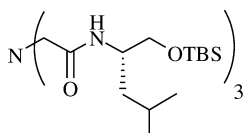
$[\alpha]_{\text{D}}^{25} = -38.1$ (c 1.50, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-iso-butylethyl)]nitrilotriacetamide

Ee = 100%

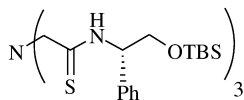
$[\alpha]_{\text{D}}^{25} = -38.8$ (c 1.0, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



$C_{48}H_{78}N_4O_3S_3Si_3$

N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-phenylethyl-)]nitrilotri(thio-acetamide)

Ee = 100%

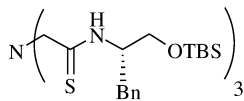
$[\alpha]_D^{25} = +35.6$ (c 0.50, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



$C_{51}H_{85}N_4O_3S_3Si_3$

N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-benzylethyl-)]nitrilotri(thio-acetamide)

Ee = 100%

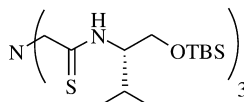
$[\alpha]_D^{25} = +103.0$ (c 0.63, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



$C_{39}H_{85}N_4O_3S_3Si_3$

N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-iso-propylethyl-)]nitrilotri(thio-acetamide)

Ee = 100%

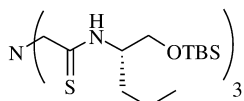
$[\alpha]_D^{25} = -105.0$ (c 0.50, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



$C_{42}H_{91}N_4O_3S_3Si_3$

N,N',N''-Tris[(1*S*)-(2-TBDMSO-1-iso-butylethyl-)]nitrilotri(thio-acetamide)

Ee = 100%

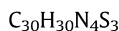
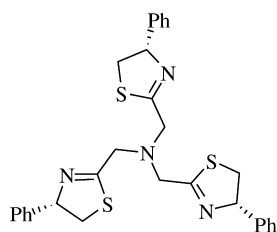
$[\alpha]_D^{25} = -62.8$ (c 1.0, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (*S*)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



Tri[[2-(4S)-(4-phenyl-1,3-thiazoliny)] methyl] amine

Ee = 100%

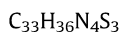
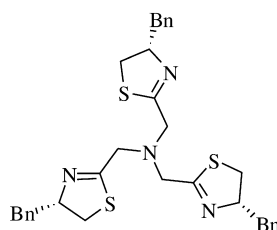
$[\alpha]_D^{25} = +126.0$ (c 0.25, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (S)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



Tri[[2-(4S)-(4-benzyl-1,3-thiazoliny)] methyl] amine

Ee = 100%

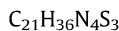
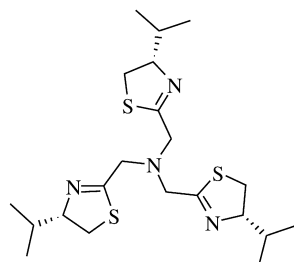
$[\alpha]_D^{25} = +120.0$ (c 0.30, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (S)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



Tri[[2-(4S)-(4-i-propyl-1,3-thiazoliny)] methyl] amine

Ee = 100%

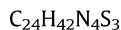
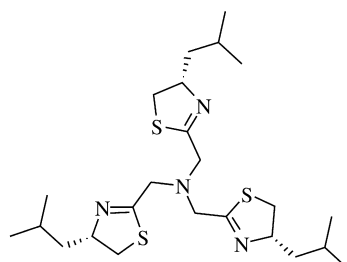
$[\alpha]_D^{25} = -65.0$ (c 0.30, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (S)

Xue-Ming Cheng, Zhong-Bo Zheng, Nan Li, Zhao-Hai Qin, Bin Fu *, Neng-Dong Wang *

Tetrahedron: Asymmetry 19 (2008) 2159



Tri[[2-(4S)-(4-i-butyl-1,3-thiazoliny)] methyl] amine

Ee = 100%

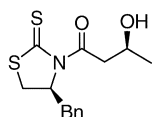
$[\alpha]_D^{25} = -95.0$ (c 0.20, CH_2Cl_2)

Source of chirality: L-amino alcohol

Absolute configuration: (S)

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



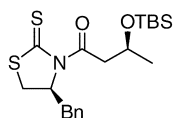
$C_{14}H_{17}NO_2S_2$

(3S)-1-[(S)-4-Benzyl-2-thioxothazolidin-3-yl]-3-hydroxybutan-1-one

$[\alpha]_D^{25} = +167.2$ (c 1.143, $CHCl_3$)
Absolute configuration: (3S,4'S)
Source of chirality: Evans Aldol reaction

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



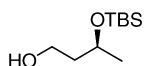
$C_{20}H_{31}NO_2S_2Si$

(3S)-1-[(S)-4-Benzyl-2-thioxothazolidin-3-yl]-3-(*tert*-butyldimethylsilyloxy)butan-1-one

$[\alpha]_D^{25} = +120.2$ (c 1.220, $CHCl_3$)
Absolute configuration: (3S,4'S)
Source of chirality: Evans Aldol reaction

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



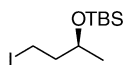
$C_{10}H_{24}O_2Si$

(S)-3-(*tert*-Butyldimethylsilyloxy)-1-butanol

$[\alpha]_D^{25} = +24.6$ (c 0.906, $CHCl_3$)
Absolute configuration: (3S)
Source of chirality: Evans Aldol reaction

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



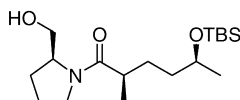
$C_{10}H_{23}IOSi$

(S)-3-(*tert*-Butyldimethylsilyloxy)butyl iodide

$[\alpha]_D^{25} = +50.2$ (c 0.833, $CHCl_3$)
Absolute configuration: (3S)
Source of chirality: Evans Aldol reaction

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



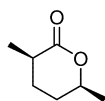
$C_{18}H_{37}NO_3Si$

(2*R*,5*S*)-5-(*tert*-Butyldimethylsilyloxy)-1-[(*S*)-2-(hydroxymethyl)pyrrolidin-1-yl]-2-methylhexan-1-one

$[\alpha]_D^{25} = +22.5$ (c 0.600, $CHCl_3$)
Absolute configuration: (2*R*,2'*S*,5*S*)
Source of chirality: asymmetric alkylation

Jian-Hong Yang, Gui-Chun Yang *, Cui-Fen Lu, Zu-Xing Chen

Tetrahedron: Asymmetry 19 (2008) 2164



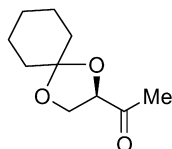
$C_7H_{12}O_2$

(2*R*,5*S*)-2-Methyl-5-hexanolide

$[\alpha]_D^{25} = -95.1$ (c 0.427, $CHCl_3$)
Absolute configuration: (2*R*,5*S*)
Source of chirality: asymmetric synthesis

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Tetrahedron: Asymmetry 19 (2008) 2167



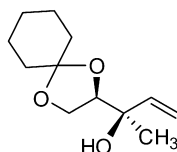
$C_{10}H_{16}O_3$

(3*R*)-3,4-Cyclohexanedioxybutan-2-one

$[\alpha]_D^{22} = +32.0$ (c 1.62, $CHCl_3$)
Source of chirality: (*R*)-cyclohexylideneglyceraldehyde
Absolute configuration: (3*R*)

Anubha Sharma, Priyadip Das, Subrata Chattopadhyay *

Tetrahedron: Asymmetry 19 (2008) 2167



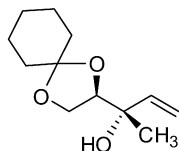
$C_{12}H_{20}O_3$

(3*R*,4*R*)-4,5-Cyclohexanedioxy-3-methylpent-1-en-3-ol

$[\alpha]_D^{22} = +11.3$ (c 1.12, $CHCl_3$)
Source of chirality: (*R*)-cyclohexylideneglyceraldehyde
Absolute configuration: (3*R*,4*R*)

Anubha Sharma, Priyadip Das, Subrata Chattopadhyay *

Tetrahedron: Asymmetry 19 (2008) 2167



C₁₂H₂₀O₃

(3S,4R)-4,5-Cyclohexanedioxy-3-methylpent-1-en-3-ol

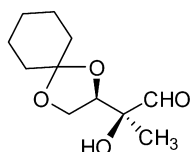
$[\alpha]_D^{22} = +20.6$ (c 1.04, CHCl₃)

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (3S,4R)

Anubha Sharma, Priyadip Das, Subrata Chattopadhyay *

Tetrahedron: Asymmetry 19 (2008) 2167



C₁₁H₁₈O₄

(2S,3R)-3,4-Cyclohexanedioxy-2-methyl-2-hydroxybutanal

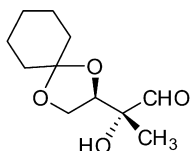
$[\alpha]_D^{22} = +16.05$ (c 1.52, CHCl₃)

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2S,3R)

Anubha Sharma, Priyadip Das, Subrata Chattopadhyay *

Tetrahedron: Asymmetry 19 (2008) 2167



C₁₁H₁₈O₄

(2R,3R)-3,4-Cyclohexanedioxy-2-hydroxy-2-methylbutanal

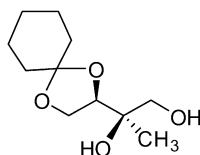
$[\alpha]_D^{22} = +18.1$ (c 1.14, CHCl₃)

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2R,3R)

Anubha Sharma, Priyadip Das, Subrata Chattopadhyay *

Tetrahedron: Asymmetry 19 (2008) 2167



C₁₁H₂₀O₄

(2R,3R)-3,4-Cyclohexanedioxy-2-methylbutane-1,2-diol

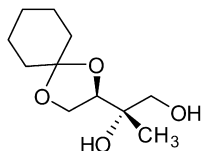
$[\alpha]_D^{22} = +11.6$ (c 1.02, CHCl₃)

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2R,3R)

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Tetrahedron: Asymmetry 19 (2008) 2167



(2S,3R)-3,4-Cyclohexanedioxy-2-methylbutane-1,2-diol

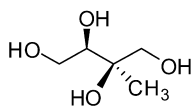
$$[\alpha]_D^{22} = +12.8 \text{ (c 1.72, CHCl}_3\text{)}$$

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2S,3R)

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Tetrahedron: Asymmetry 19 (2008) 2167



(2R,3R)-2-Methylbutane-1,2,3,4-tetrol

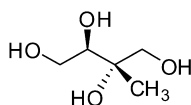
$$[\alpha]_D^{22} = +11.2 \text{ (c 1.41, MeOH)}$$

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2R,3R)

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Tetrahedron: Asymmetry 19 (2008) 2167



(2S,3R)-2-Methylbutane-1,2,3,4-tetrol

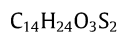
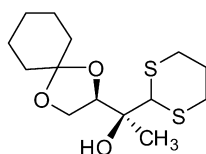
$$[\alpha]_D^{22} = +15.0 \text{ (c 1.44, MeOH)}$$

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2S,3R)

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Tetrahedron: Asymmetry 19 (2008) 2167



(2S,3R)-3,4-Cyclohexanedioxy-2-methyl-2-(1',3'-propanediylthio)butan-2-ol

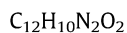
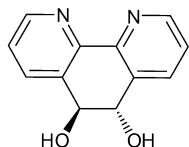
$$[\alpha]_D^{22} = +12.45 \text{ (c 2.86, CHCl}_3\text{)}$$

Source of chirality: (R)-cyclohexylideneglyceraldehyde

Absolute configuration: (2S,3R)

Claudia Sanfilippo *, Giovanni Nicolosi

Tetrahedron: Asymmetry 19 (2008) 2171



(5S,6S)-Dihydro-5,6-dihydroxy-1,10-phenanthroline

Ee = 94%

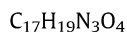
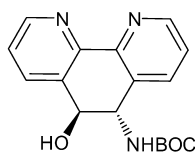
$[\alpha]_D^{25} = -75.1$ (c 0.4, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5S,6S)

Claudia Sanfilippo *, Giovanni Nicolosi

Tetrahedron: Asymmetry 19 (2008) 2171



(5S,6S)-Dihydro-5-hydroxy-6-*tert*-butoxycarbonylamino-1,10-phenanthroline

Ee = 96%

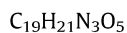
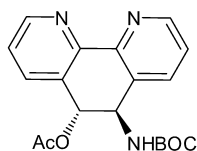
$[\alpha]_D^{25} = +51.9$ (c 0.2, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (5S,6S)

Claudia Sanfilippo *, Giovanni Nicolosi

Tetrahedron: Asymmetry 19 (2008) 2171



(5R,6R)-Dihydro-5-acetoxy-6-*tert*-butoxycarbonylamino-1,10-phenanthroline

Ee = 90%

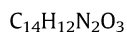
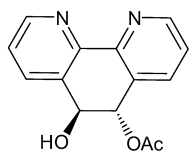
$[\alpha]_D^{25} = -68.9$ (c 0.3, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5R,6R)

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Tetrahedron: Asymmetry 19 (2008) 2171



(5S,6S)-Dihydro-5-acetoxy-6-hydroxy-1,10-phenanthroline

Ee = 90%

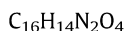
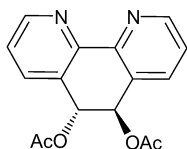
$[\alpha]_D^{25} = +75.0$ (c 0.6, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5S,6S)

Claudia Sanfilippo *, Giovanni Nicolosi

Tetrahedron: Asymmetry 19 (2008) 2171



(5R,6R)-Dihydro-5,6-diacetoxy-1,10-phenanthroline

Ee = 94%

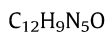
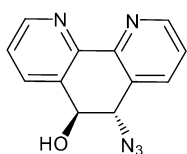
$[\alpha]_D^{25} = -211.4$ (c 0.3, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5R,6R)

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Tetrahedron: Asymmetry 19 (2008) 2171



(5S,6S)-Dihydro-5-azido-6-hydroxy-1,10-phenanthroline

Ee >98%

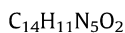
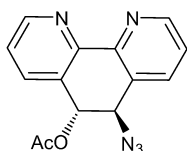
$[\alpha]_D^{25} = -67.5$ (c 0.6, CHCl₃)

Source of chirality: enzymatic resolution

Absolute configuration: (5S,6S)

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Tetrahedron: Asymmetry 19 (2008) 2171



(5R,6R)-Dihydro-5-acetoxy-6-azido-1,10-phenanthroline

Ee = 97%

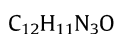
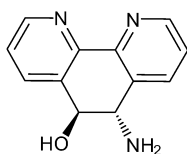
$[\alpha]_D^{25} = -264.5$ (c 0.6, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5R,6R)

Claudia Sanfilippo *, Giovanni Nicolosi

Tetrahedron: Asymmetry 19 (2008) 2171



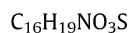
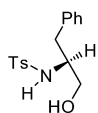
(5S,6S)-Dihydro-5-amino-6-hydroxy-1,10-phenanthroline

Ee >98%

$[\alpha]_D^{25} = -51.9$ (c 0.1, CH₃OH)

Source of chirality: enzymatic resolution

Absolute configuration: (5S,6S)

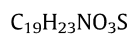
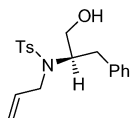


(S)-3-Phenyl-2-(tosylamino)propan-1-ol

$$[\alpha]_D^{29} = -21.4 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (S)

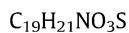
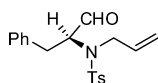


(S)-2-(N-Allyl-N-tosylamino)-3-phenylpropan-1-ol

$$[\alpha]_D^{29} = -1.2 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (S)

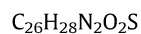
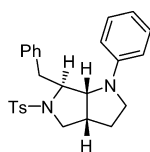


(S)-2-(N-Allyl-N-tosylamino)-3-phenylpropanal

$$[\alpha]_D^{29} = -0.2 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (S)

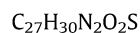
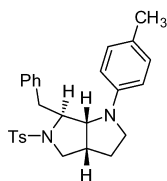


(3aR,6S,6aR)-cis-1-Phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_D^{28} = +6.6 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

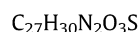
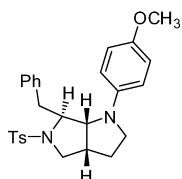


(3aR,6S,6aR)-cis-1-(4-Methyl)-phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_{\text{D}}^{29} = 27.5 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

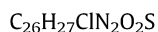
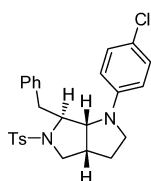


(3aR,6S,6aR)-cis-1-(4-Methoxy)-phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_{\text{D}}^{29} = +24.6 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

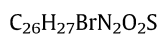
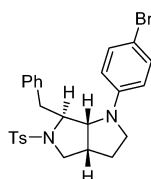


(3aR,6S,6aR)-cis-1-(4-Chloro)-phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_{\text{D}}^{28} = +27.0 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

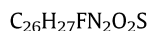
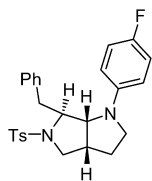


(3aR,6S,6aR)-cis-1-(4-Bromo)-phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_{\text{D}}^{29} = +29.8 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

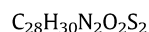
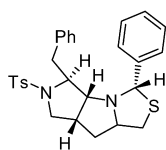


(3aR,6S,6aR)-cis-1-(4-Fluoro)-phenyl-5-tosyl-6-benzyl-octahydropyrrolo[3,4-b]pyrrole

$$[\alpha]_{\text{D}}^{27} = +2.5 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (3aR,6S,6aR)

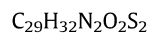
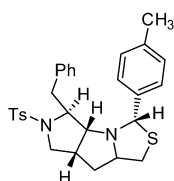


(2S,3aR,4S,6aR,7aR)-cis-2-Phenyl-4-benzyl-5-N-(p-methyl)-benzenesulfonyl perhydro thiazolo[3',4'-2,3]pyrrolo[4,5-c]pyrrole

$$[\alpha]_{\text{D}}^{29} = -10.6 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (2S,3aR,4S,6aR,7aR)

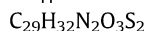
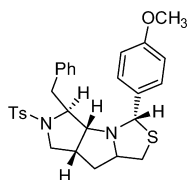


(2S,3aR,4S,6aR,7aR)-cis-2-(p-Methyl)-phenyl-4-benzyl-5-N-(p-methyl)-benzene sulfonyl perhydrothiazolo[3',4'-2,3]pyrrolo[4,5-c]pyrrole

$$[\alpha]_{\text{D}}^{29} = -14.8 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (2S,3aR,4S,6aR,7aR)



(2S,3aR,4S,6aR,7aR)-cis-2-(p-Methoxy)-phenyl-4-benzyl-5-N-(p-methyl)-benzenesulfonyl perhydrothiazolo[3',4'-2,3]pyrrolo[4,5-c]pyrrole

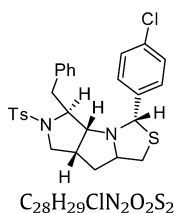
$$[\alpha]_{\text{D}}^{29} = -15.8 \text{ (c 1, CHCl}_3\text{)}$$

Source of chirality: chiral starting material

Absolute configuration: (2S,3aR,4S,6aR,7aR)

Mahalingam Poornachandran, Raghavachary Raghunathan *

Tetrahedron: Asymmetry 19 (2008) 2177

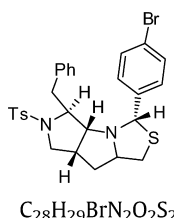


(2*S*,3*aR*,4*S*,6*aR*,7*aR*)-*cis*-2-(*p*-Chloro)-4-benzyl-5-*N*-(*p*-methyl)-benzenesulfonyl perhydro thiazolo[3',4'-2,3]pyrrolo[4,5-*c*]-pyrrole

$[\alpha]_D^{29} = -12.8$ (c 1, CHCl₃)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,3*aR*,4*S*,6*aR*,7*aR*)

Mahalingam Poornachandran, Raghavachary Raghunathan *

Tetrahedron: Asymmetry 19 (2008) 2177

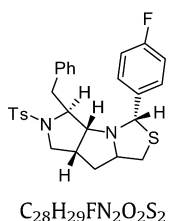


(2*R*,3*aR*,4*S*,6*aR*,7*aR*)-*cis*-2-(*p*-Bromo)-phenyl-4-benzyl-5-*N*-(*p*-methyl)-benzenesulfonyl perhydrothiazolo[3',4'-2,3]pyrrolo[4,5-*c*]pyrrole

$[\alpha]_D^{29} = -13.8$ (c 1, CHCl₃)
Source of chirality: chiral starting material
Absolute configuration: (2*R*,3*aR*,4*S*,6*aR*,7*aR*)

Mahalingam Poornachandran, Raghavachary Raghunathan *

Tetrahedron: Asymmetry 19 (2008) 2177

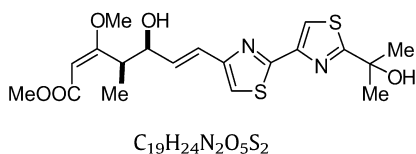


(2*S*,3*aR*,4*S*,6*aR*,7*aR*)-*cis*-2-(*p*-Fluoro)phenyl-4-benzyl-5-*N*-(*p*-methyl)-benzene sulfonyl perhydro thiazolo[3',4'-2,3]pyrrolo[4,5-*c*]pyrrole

$[\alpha]_D^{29} = -15.6$ (c 1, CHCl₃)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,3*aR*,4*S*,6*aR*,7*aR*)

Yuki Iwaki, Shigeo Yamamura, Hiroyuki Akita *

Tetrahedron: Asymmetry 19 (2008) 2192

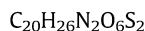
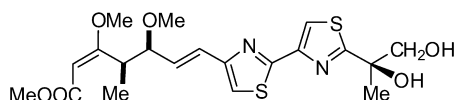


14-Hydroxycystothiazole C

$[\alpha]_D^{22} = +112.6$ (c 1.17, CHCl₃)
Ee = >99%
Source of chirality: lipase
Absolute configuration: (4*R*,5*S*)

Yuki Iwaki, Shigeo Yamamura, Hiroyuki Akita *

Tetrahedron: Asymmetry 19 (2008) 2192



(14R,15)-Dihydroxycystothiazole A

$[\alpha]_D^{23} = +113.0$ (c 0.76, $CHCl_3$)

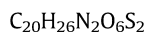
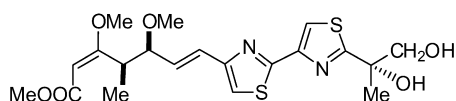
Ee = >99%

Source of chirality: lipase

Absolute configuration: (4R,5S,14R)

Yuki Iwaki, Shigeo Yamamura, Hiroyuki Akita *

Tetrahedron: Asymmetry 19 (2008) 2192



(14S,15)-Dihydroxycystothiazole A

$[\alpha]_D^{24} = +77.8$ (c 0.675, $CHCl_3$)

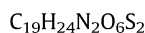
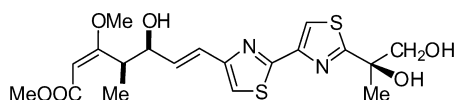
Ee = >99%

Source of chirality: lipase

Absolute configuration: (4R,5S,14S)

Yuki Iwaki, Shigeo Yamamura, Hiroyuki Akita *

Tetrahedron: Asymmetry 19 (2008) 2192



(14R,15)-Dihydroxycystothiazole C

$[\alpha]_D^{24} = +145.9$ (c 0.64, $CHCl_3$)

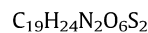
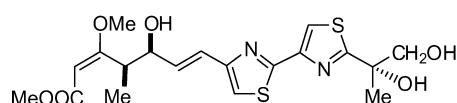
Ee = >99%

Source of chirality: lipase

Absolute configuration: (4R,5S,14R)

Yuki Iwaki, Shigeo Yamamura, Hiroyuki Akita *

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(14S,15)-Dihydroxycystothiazole C

$[\alpha]_D^{25} = +91.1$ (c 1.00, $CHCl_3$)

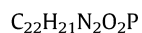
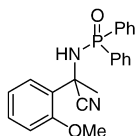
Ee = >99%

Source of chirality: lipase

Absolute configuration: (4R,5S,14S)

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201

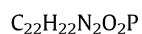
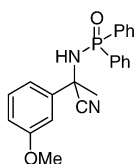


N-[1-Cyano-1-(2-methoxyphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -2.15 \text{ (c 1.3, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201

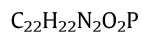
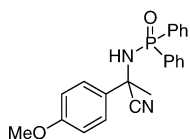


N-[1-Cyano-1-(3-methoxyphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -4.9 \text{ (c 1.6, CH}_2\text{Cl}_2\text{)}$$

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Tetrahedron: Asymmetry 19 (2008) 2201

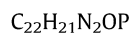
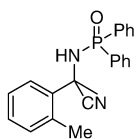


N-[1-Cyano-1-(4-methoxyphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -2.35 \text{ (c 0.85, CH}_2\text{Cl}_2\text{)}$$

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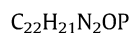
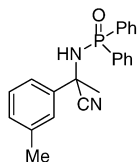


N-[1-Cyano-1-(2-methylphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -2.7 \text{ (c 2.0, CH}_2\text{Cl}_2\text{)}$$

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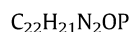
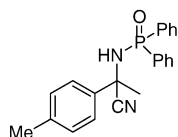


N-[1-Cyano-1-(3-methylphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -1.7 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

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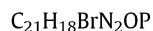
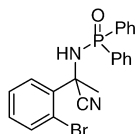


N-[1-Cyano-1-(4-methylphenyl)ethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -1.7 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

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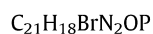
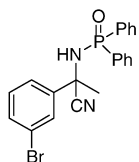


N-[1-(2-Bromophenyl)-1-cyanoethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -1.3 \text{ (c 1.15, CH}_2\text{Cl}_2\text{)}$$

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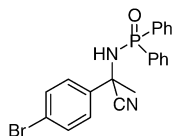


N-[1-(3-Bromophenyl)-1-cyanoethyl]diphenylphosphinic amide

$$[\alpha]_{\text{D}}^{23} = -4.6 \text{ (c 1.4, CH}_2\text{Cl}_2\text{)}$$

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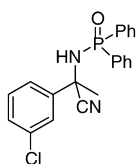
$C_{21}H_{18}BrN_2OP$

N-[1-(4-Bromophenyl)-1-cyanoethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -6.4 \text{ (c 1.15, CH}_2\text{Cl}_2\text{)}$$

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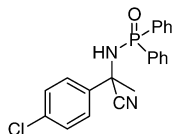
$C_{21}H_{18}ClN_2OP$

N-[1-(3-Chlorophenyl)-1-cyanoethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -3.2 \text{ (c 1.25, CH}_2\text{Cl}_2\text{)}$$

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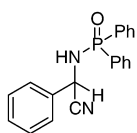
$C_{21}H_{18}ClN_2OP$

N-[1-(4-Chlorophenyl)-1-cyanoethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -5.7 \text{ (c 0.85, CH}_2\text{Cl}_2\text{)}$$

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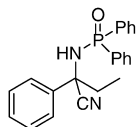
$C_{20}H_{17}N_2OP$

N-Cyano(phenyl)methyl(diphenyl)phosphinic amide

$$[\alpha]_D^{23} = -0.6 \text{ (c 1.2, CH}_2\text{Cl}_2\text{)}$$

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Tetrahedron: Asymmetry 19 (2008) 2201



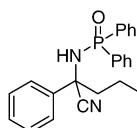
$C_{22}H_{21}N_2OP$

N-(1-Cyano-1-phenylpropyl)diphenylphosphinic amide

$$[\alpha]_D^{23} = +0.9 \text{ (c 1.2, CH}_2\text{Cl}_2\text{)}$$

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Tetrahedron: Asymmetry 19 (2008) 2201



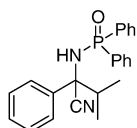
$C_{23}H_{23}N_2OP$

N-(1-Cyano-1-phenylbutyl)diphenylphosphinic amide

$$[\alpha]_D^{23} = -3.4 \text{ (c 0.85, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201



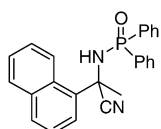
$C_{23}H_{23}N_2OP$

N-(1-Cyano-2-methyl-1-phenylpropyl)diphenylphosphinic amide

$$[\alpha]_D^{23} = -3.2 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201



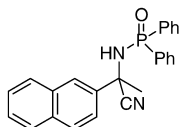
$C_{25}H_{21}N_2OP$

N-[1-Cyano-1-(1-naphthyl)ethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -1.2 \text{ (c 1.25, CH}_2\text{Cl}_2\text{)}$$

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Tetrahedron: Asymmetry 19 (2008) 2201



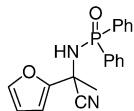
$C_{25}H_{21}N_2OP$

N-[1-Cyano-1-(2-naphthyl)ethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -3.2 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201



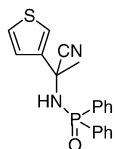
$C_{19}H_{17}N_2O_2P$

N-[1-Cyano-1-(2-furyl)ethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -2.7 \text{ (c 0.9, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201



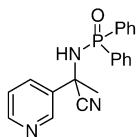
$C_{19}H_{17}N_2OPS$

N-[1-Cyano-1-(3-thienyl)ethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -0.9 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

Yi-Jing Chen, Chinpiao Chen *

Tetrahedron: Asymmetry 19 (2008) 2201



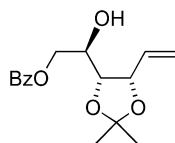
$C_{20}H_{18}N_3OP$

N-[1-Cyano-1-(3-pyridyl)ethyl]diphenylphosphinic amide

$$[\alpha]_D^{23} = -2.4 \text{ (c 1.05, CH}_2\text{Cl}_2\text{)}$$

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$C_{16}H_{20}O_5$

(2R,3S,4S)-2-Hydroxy-3,4-O-isopropylidene-hex-5-enyl benzoate

Ee >99%

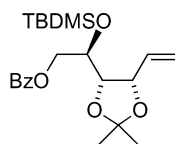
$[\alpha]_D = +13.2$ (c 0.98, $CHCl_3$)

Source of chirality: D-ribose

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

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Tetrahedron: Asymmetry 19 (2008) 2210



$C_{22}H_{34}O_5Si$

(2R,3S,4S)-2-tert-Butyldimethylsilyloxy-3,4-O-isopropylidene-hex-5-enyl benzoate

Ee >99%

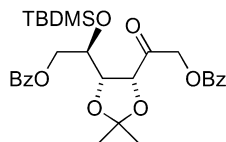
$[\alpha]_D = -2.3$ (c 1.03, $CHCl_3$)

Source of chirality: D-ribose

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

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Tetrahedron: Asymmetry 19 (2008) 2210



$C_{29}H_{38}O_8Si$

1,6-Di-O-benzoyl-5-O-tert-butyldimethylsilyl-3,4-O-isopropylidene-D-psicose

Ee >99%

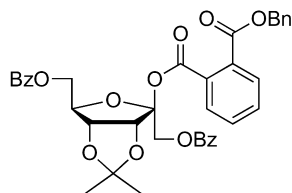
$[\alpha]_D = +21.0$ (c 1.05, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: (3R,4S,5R)

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$C_{38}H_{34}O_{11}$

(1,6-Di-O-benzoyl-3,4-O-isopropylidene-beta-D-psicofuranosyl) benzyl phthalate

Ee >99%

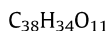
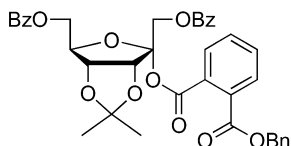
$[\alpha]_D = -11.1$ (c 0.89, $CHCl_3$)

Source of chirality: D-ribose

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

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(1,6-Di-O-benzoyl-3,4-O-isopropylidene- α -D-psicofuranosyl) benzyl phthalate

Ee >99%

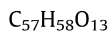
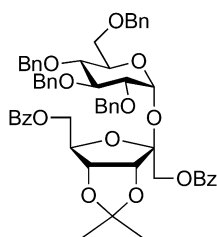
$[\alpha]_D = +6.5$ (c 1.06, $CHCl_3$)

Source of chirality: D-ribose

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

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(1,6-Di-O-benzoyl-3,4-O-isopropylidene- β -D-psicofuranosyl) 2,3,4,6-tetra-O-benzyl- α -D-glucopyranoside

Ee >99%

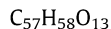
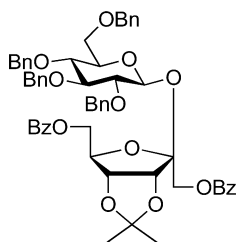
$[\alpha]_D = +29.0$ (c 1.08, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,3'R,4'R,5'R,1S,2R,3S,4R,5R)

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(1,6-Di-O-benzoyl-3,4-O-isopropylidene- β -D-psicofuranosyl) 2,3,4,6-tetra-O-benzyl- β -D-glucopyranoside

Ee >99%

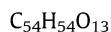
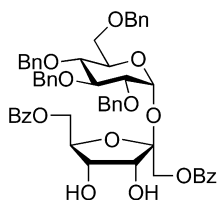
$[\alpha]_D = -13.8$ (c 1.00, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,3'R,4'R,5'R,1R,2R,3S,4R,5R)

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(1,6-Di-O-benzoyl- β -D-psicofuranosyl) 2,3,4,6-tetra-O-benzyl- α -D-glucopyranoside

Ee >99%

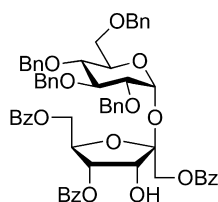
$[\alpha]_D = +55.5$ (c 1.03, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,3'R,4'S,5'R,1R,2R,3S,4R,5R)

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$C_{61}H_{58}O_{14}$

(1,3,6-Tri-O-benzoyl- β -D-psicofuranosyl) 2,3,4,6-tetra-O-benzyl- α -D-glucopyranoside

Ee >99%

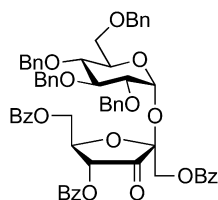
$[\alpha]_D = +37.5$ (c 0.99, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,3'R,4'S,5'R,1R,2R,3S,4R,5R)

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$C_{61}H_{56}O_{14}$

(1,4,6-Tri-O-benzoyl- β -D-erythro-2,3-hexodiulofuranosyl) 2,3,4,6-tetra-O-benzyl- α -D-glucopyranoside

Ee >99%

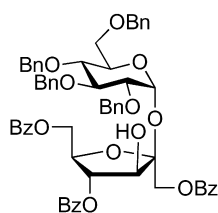
$[\alpha]_D = +98.5$ (c 0.68, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,4'R,5'R,1R,2R,3S,4R,5R)

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$C_{61}H_{58}O_{14}$

(1,4,6-Tri-O-benzoyl- β -D-fructofuranosyl) 2,3,4,6-tetra-O-benzyl- α -D-glucopyranoside

Ee >99%

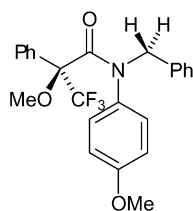
$[\alpha]_D = +39.2$ (c 1.00, $CHCl_3$)

Source of chirality: D-ribose, D-glucose

Absolute configuration: (2'S,3'S,4'S,5'R,1R,2R,3S,4R,5R)

Jonathan Clayden *, Loïc Lemiègre, Mark Pickworth

Tetrahedron: Asymmetry 19 (2008) 2218



$C_{24}H_{22}F_3NO_3$

N-Benzyl-3,3,3-trifluoro-2-methoxy-N-(4-methoxyphenyl)-2-phenylpropanamide

$[\alpha]_D^{24} = -106$ (c 0.4, CH_2Cl_2)