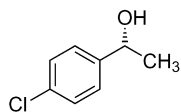


Stereochemistry abstracts

Eshabi B. Kurbanoglu,* Kani Zilbeyaz, Namudar I. Kurbanoglu and Hamdullah Kilic*

Tetrahedron: Asymmetry 18 (2007) 1159



(*R*)-1-(4-Chlorophenyl)ethanol

Ee >99% HPLC

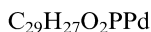
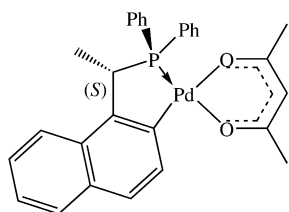
$[\alpha]_D^{20} = +53.3$ (*c* 0.2, Et₂O)

Source of chirality: microbial reduction

Absolute configuration: (*R*)

Joseph K. P. Ng, Shuli Chen, Geok K. Tan and Pak-H. Leung*

Tetrahedron: Asymmetry 18 (2007) 1163



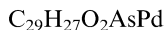
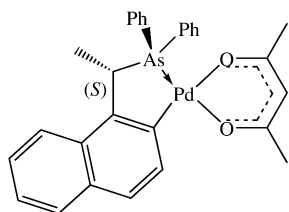
(Acetylacetonato-*O,O'*){(*S*)-1-[1-(diphenylphosphino)ethyl]naphthyl-*C*²,*P*} palladium(II)

$[\alpha]_D = +594$ (*c* 0.5, CH₂Cl₂)

Absolute configuration: (*S*)

Joseph K. P. Ng, Shuli Chen, Geok K. Tan and Pak-H. Leung*

Tetrahedron: Asymmetry 18 (2007) 1163



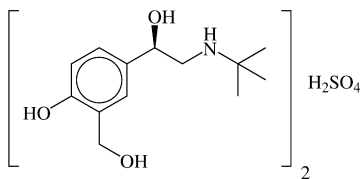
(Acetylacetonato-*O,O'*){(*S*)-1-[1-(diphenylarsino)ethyl]naphthyl-*C*²,*As*} palladium(II)

$[\alpha]_D = +391$ (*c* 0.4, CH₂Cl₂)

Absolute configuration: (*S*)

Sara M. Palacios* and Marcela A. Palacio

Tetrahedron: Asymmetry 18 (2007) 1170



(1*R*)-2-*tert*-Butylamino-1-(4-hydroxy-3-hydroxy-methyl) phenyl ethanol

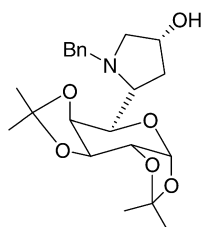
Ee = 99.8%

$[\alpha]_D^{20} = -36.5$ (*c* 1, MeOH)

Source of chirality: preferential crystallization

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



$C_{22}H_{31}NO_6$

6,7,9-Trideoxy-6,9-(*N*-benzylimino)-1,2:3,4-di-*O*-isopropylidene-8(*R*)-hydroxy- β -L-*threo*-D-*galacto*-non-1,5-pyranose

Ee = 100%

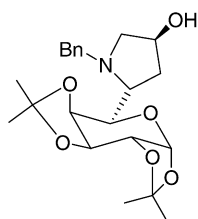
$[\alpha]_D^{25} = -24$ (*c* 0.41, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*,8*R*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



$C_{22}H_{31}NO_6$

6,7,9-Trideoxy-6,9-(*N*-benzylimino)-1,2:3,4-di-*O*-isopropylidene-8(*S*)-hydroxy- α -D-*erythro*-D-*galacto*-non-1,5-pyranose

Ee = 100%

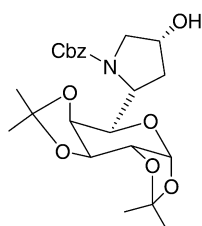
$[\alpha]_D^{25} = +36.0$ (*c* 0.05, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*,8*S*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



$C_{23}H_{31}NO_8$

6,7,9-Trideoxy-6,9-(*N*-benzylimino)-1,2:3,4-di-*O*-isopropylidene-8(*S*)-hydroxy- α -D-*erythro*-D-*galacto*-non-1,5-pyranose

Ee = 100%

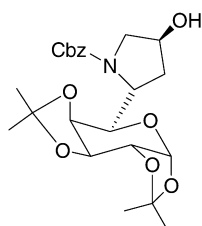
$[\alpha]_D^{25} = +8.0$ (*c* 0.05, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*,8*S*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



$C_{22}H_{31}NO_6$

6,7,9-Trideoxy-6,9-(*N*-benzylimino)-1,2:3,4-di-*O*-isopropylidene-8(*R*)-hydroxy- β -L-*threo*-D-*galacto*-non-1,5-pyranose

Ee = 100%

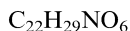
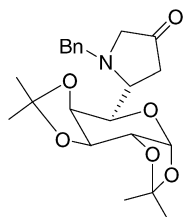
$[\alpha]_D^{25} = +400$ (*c* 0.03, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*,8*R*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



6,7,9-Trideoxy-6,9-(*N*-benzylimino)-1,2:3,4-di-*O*-isopropylidene- α -D-galacto-non-1,5-pyranose

Ee = 100%

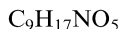
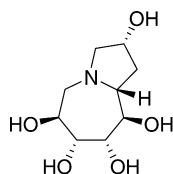
$[\alpha]_D^{25} = +36$ (*c* 0.05, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (1*R*,2*R*,3*S*,4*S*,5*R*,6*R*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



(2*R*,6*S*,7*R*,8*S*,9*R*,9*aR*)-2,6,7,8,9-Pentahydroxy-perhydroazaazulene

Ee = 100%

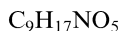
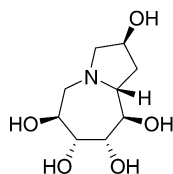
$[\alpha]_D^{25} = +7.0$ (*c* 0.5, MeOH)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (2*R*,6*S*,7*R*,8*S*,9*R*,9*aR*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



(2*S*,6*S*,7*R*,8*S*,9*R*,9*aR*)-2,6,7,8,9-Pentahydroxy-perhydroazaazulene

Ee = 100%

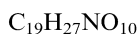
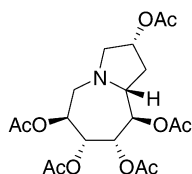
$[\alpha]_D^{25} = +90.9$ (*c* 0.11, MeOH)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (2*S*,6*S*,7*R*,8*S*,9*R*,9*aR*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



(2*R*,6*S*,7*R*,8*S*,9*R*,9*aR*)-2,6,7,8,9-Pentahydroxy-perhydroazaazulene

Ee = 100%

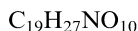
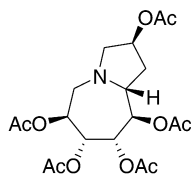
$[\alpha]_D^{25} = +208$ (*c* 1.05, $CHCl_3$)

Source of chirality: 1,2:3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (2*S*,6*S*,7*R*,8*S*,9*R*,9*aR*)

Omprakash P. Bande, Vrushali H. Jadhav, Vedavati G. Puranik and Dilip D. Dhavale*

Tetrahedron: Asymmetry 18 (2007) 1176



(2*S*,6*S*,7*R*,8*S*,9*R*,9*aR*)-2,6,7,8,9-Penta-acetoxy-perhydroazaazulene

Ee = 100%

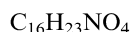
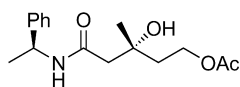
$[\alpha]_D^{25} = +324.3$ (*c* 1.55, MeOH)

Source of chirality: 1,2,3,4-di-*O*-isopropylidene- α -D-galactopyranose

Absolute configuration: (2*S*,6*S*,7*R*,8*S*,9*R*,9*aR*)

Yasunao Hattori, Ko-hei Horikawa, Hidefumi Makabe, Nobuhiro Hirai, Mitsuru Hirota and Tsunashi Kamo*

Tetrahedron: Asymmetry 18 (2007) 1183



(3*R*)-5-*O*-Acetyl-1-[(*S*)-phenylethyl]mevalonamide

Ee = 100%

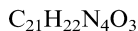
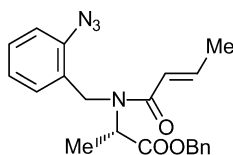
$[\alpha]_D^{18} = -59.0$ (*c* 3.75, CHCl₃)

Source of chirality: natural product

Absolute configuration: (3*R*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



2-{*N*-[1-(*S*)-(1-Benzoyloxycarbonyl)ethyl]-*N*-(1-oxo-2-(*E*)-butenyl)}methylamino phenylazide

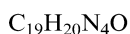
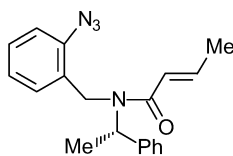
$[\alpha]_D^{25} = -15.2$ (*c* 0.21, CHCl₃)

Source of chirality: the corresponding aminoderivative

Absolute configuration: (*S*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



2-[*N*-(1-(*S*)-Phenylethyl)-*N*-(1-oxo-2-(*E*)-butenyl)]methylamino phenylazide

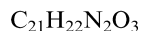
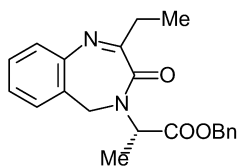
$[\alpha]_D^{25} = -66.0$ (*c* 0.24, CHCl₃)

Source of chirality: the corresponding aminoderivative

Absolute configuration: (*S*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



2-Ethyl-4-[1-(*S*)-(1-benzoyloxycarbonyl)ethyl]-4,5-dihydro-1,4-benzodiazepin-3-one

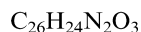
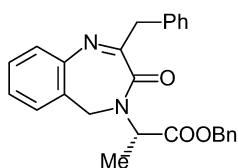
$[\alpha]_D^{25} = +241.0$ (*c* 0.22, $CHCl_3$)

Source of chirality: the corresponding azidoderivative

Absolute configuration: (*S*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



2-Benzyl-4-[1-(*S*)-(1-benzoyloxycarbonyl)ethyl]-4,5-dihydro-1,4-benzodiazepin-3-one

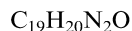
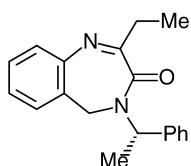
$[\alpha]_D^{25} = +135.1$ (*c* 0.20, $CHCl_3$)

Source of chirality: the corresponding azidoderivative

Absolute configuration: (*S*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



2-Ethyl-4-(1-(*S*)-phenylethyl)-4,5-dihydro-1,4-benzodiazepin-3-one

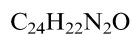
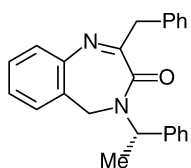
$[\alpha]_D^{25} = +54.6$ (*c* 0.24, CH_2Cl_2)

Source of chirality: the corresponding azidoderivative

Absolute configuration: (*S*)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197

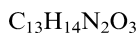
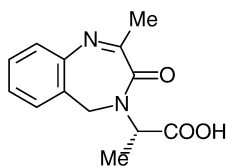


2-Benzyl-4-(1-(*S*)-phenylethyl)-4,5-dihydro-1,4-benzodiazepin-3-one

$[\alpha]_D^{25} = +107.1$ (*c* 0.14, $CHCl_3$)

Source of chirality: the corresponding azidoderivative

Absolute configuration: (*S*)

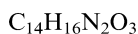
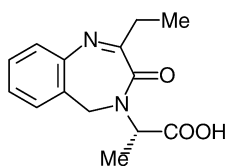


2-Methyl-4-[1-(S)-(1-hydroxycarbonyl)ethyl]-4,5-dihydro-1,4-benzodiazepin-3-one

$$[\alpha]_{\text{D}}^{25} = +76.0 \text{ (} c \text{ 0.17, CHCl}_3 \text{)}$$

Source of chirality: the corresponding benzylester

Absolute configuration: (S)

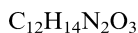
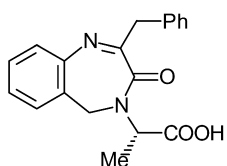


2-Ethyl-4-[1-(S)-(1-hydroxycarbonyl)ethyl]-4,5-dihydro-1,4-benzodiazepin-3-one

$$[\alpha]_{\text{D}}^{25} = +129.6 \text{ (} c \text{ 0.23, CHCl}_3 \text{)}$$

Source of chirality: the corresponding benzylester

Absolute configuration: (S)

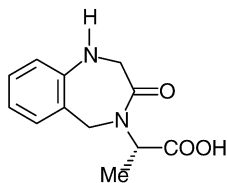


2-Benzyl-4-[1-(S)-(1-hydroxycarbonyl)ethyl]-4,5-dihydro-1,4-benzodiazepin-3-one

$$[\alpha]_{\text{D}}^{25} = +289.6 \text{ (} c \text{ 0.38, CHCl}_3 \text{)}$$

Source of chirality: the corresponding benzylester

Absolute configuration: (S)



4-[1-(S)-(1-Hydroxycarbonyl)ethyl]-1,2,4,5-tetrahydro-1,4-benzodiazepin-3-one

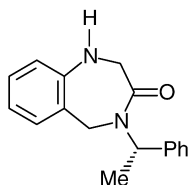
$$[\alpha]_{\text{D}}^{25} = -35.1 \text{ (} c \text{ 0.77, CHCl}_3 \text{)}$$

Source of chirality: the corresponding 2-benzyl-4,5-dihydro-1,4-benzodiazepin-3-one

Absolute configuration: (S)

Giorgio Molteni* and Paola Del Buttero

Tetrahedron: Asymmetry 18 (2007) 1197



4-(1-(*S*)-Phenylethyl)-1,2,4,5-tetrahydro-1,4-benzodiazepin-3-one

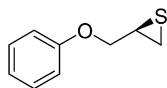
$[\alpha]_D^{25} = -107.1$ (*c* 0.14, $CHCl_3$)

Source of chirality: the corresponding 2-benzyl-4,5-dihydro-1,4-benzodiazepin-3-one

Absolute configuration: (*S*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



(*R*)-(+)-2-(Phenoxymethyl)thiirane

Ee = 93%

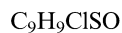
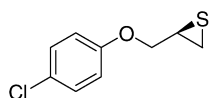
$[\alpha]_D^{20.5} = +16.5$ (*c* 2, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



(*R*)-(+)-2-((4-Chlorophenoxy)methyl)thiirane

Ee = 95%

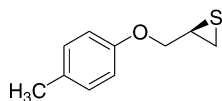
$[\alpha]_D^{24} = +11.4$ (*c* 2.89, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



(*R*)-(+)-2-(*p*-Tolyloxymethyl)thiirane

Ee = 96%

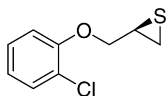
$[\alpha]_D^{25} = +11.7$ (*c* 3.16, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



C_9H_9ClSO

(*R*)-(+)-2-(2-Chlorophenoxy)methylthiirane

Ee = 99%

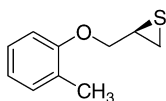
$[\alpha]_D^{25} = +3$ (*c* 2, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



$C_{10}H_{12}SO$

(*R*)-(+)-2-(*o*-Tolylloxymethyl)thiirane

Ee = 92%

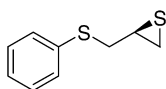
$[\alpha]_D^{31.5} = +13.6$ (*c* 2.5, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



$C_9H_{10}S_2$

(*R*)-(-)-2-(Phenylsulphanylmethyl)thiirane

Ee = 55%

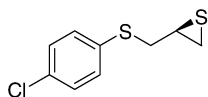
$[\alpha]_D^{29} = -32.8$ (*c* 5, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



$C_9H_9ClS_2$

(*R*)-(-)-2-((4-Chlorophenylsulphanyl)methyl)thiirane

Ee = 80%

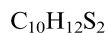
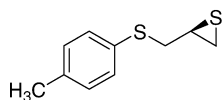
$[\alpha]_D^{25} = -44.95$ (*c* 5, $CHCl_3$)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (*R*)

Edyta Łukowska and Jan Pleniewicz*

Tetrahedron: Asymmetry 18 (2007) 1202



(R)-(-)-2-(p-Tolylsulphanylmethyl)thiirane

Ee = 56%

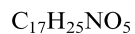
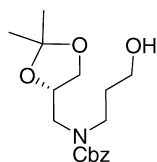
$[\alpha]_{\text{D}}^{25} = -37.9$ (c 5.38, CHCl_3)

Source of chirality: chemo-enzymatic preparation

Absolute configuration: (R)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



Benzyl {[[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl} (3-hydroxypropyl)carbamate

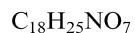
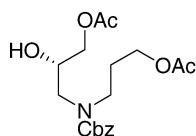
$[\alpha]_{\text{D}}^{25} = -7.6$ (c 1, CHCl_3)

Source of chirality: D-mannitol

Absolute configuration: (4S)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



Benzyl (2S)-3-acetoxy-2-hydroxypropyl-3-acetoxypropylcarbamate

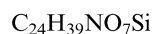
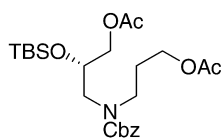
$[\alpha]_{\text{D}}^{25} = -5.0$ (c 1, CHCl_3)

Source of chirality: D-mannitol

Absolute configuration: (2S)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



Benzyl (2S)-3-acetoxy-2-tert-butyldimethylsilyloxypropyl-3-acetoxypropylcarbamate

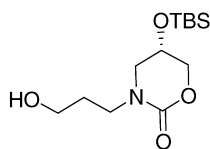
$[\alpha]_{\text{D}}^{25} = -9.2$ (c 1, CHCl_3)

Source of chirality: D-mannitol

Absolute configuration: (2S)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{13}H_{27}NO_4Si$

(5*S*)-5-*tert*-Butyldimethylsilyloxy-3-(3-hydroxypropyl)-1,3-oxazinan-2-one

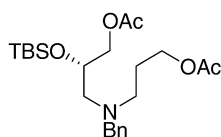
$[\alpha]_D^{25} = -5.3$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (5*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{23}H_{39}NO_5Si$

{[(2*S*)-3-Acetoxy-2-*tert*-butyl dimethylsilyloxypropyl](benzyl)amino}propylacetate

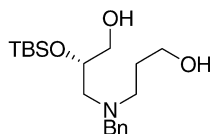
$[\alpha]_D^{25} = -12.2$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (2*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{19}H_{25}NO_3Si$

(2*S*)-2-*tert*-Butyl dimethylsilyloxy-3-[benzyl(3-hydroxypropyl)amino]propanol

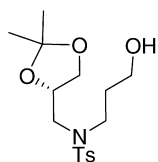
$[\alpha]_D^{25} = -13.4$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (2*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{16}H_{25}NO_5S$

N-{[(4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl]methyl}-*N*-(3-hydroxypropyl)-4-methylbenzenesulfonamide

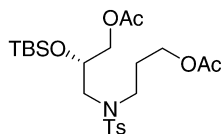
$[\alpha]_D^{25} = -11.0$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (4*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{23}H_{39}NO_7SSi$

(2*S*)-3-Acetoxy-2-*tert*-butyldimethylsilyloxypropyl-*N*-(3-acetoxypropyl)-4-methylbenzenesulfonamide

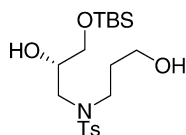
$[\alpha]_D^{25} = +5.25$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (2*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{19}H_{35}NO_5SSi$

(2*S*)-2-Hydroxy-3-*tert*-butyldimethylsilyloxypropyl-*N*-(hydroxypropyl)-4-methylbenzenesulfonamide

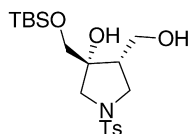
$[\alpha]_D^{25} = -7.5$ (*c* 1, $CHCl_3$)

Source of chirality: D-mannitol

Absolute configuration: (2*S*)

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{19}H_{33}NO_5SSi$

(3*R*,4*S*)-3-Hydroxy-4-(hydroxymethyl)-*N*-[4-methylphenylsulfonyl]pyrrolidin-3-yl-methyl-*tert*-butyldimethylsilylether

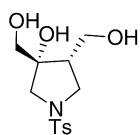
$[\alpha]_D^{25} = -5.1$ (*c* 0.5, MeOH)

Source of chirality: L-proline catalyzed aldol reaction

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

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{13}H_{19}NO_5S$

(3*R*,4*S*)-3,4-Bis(hydroxymethyl)-1-[(4-methylphenyl)sulfonyl]pyrrolidin-3-ol

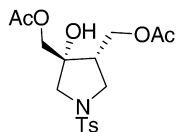
$[\alpha]_D^{25} = -3.9$ (*c* 1, MeOH)

Source of chirality: L-proline catalyzed aldol reaction

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

Indresh Kumar, S. R. Bhide and C. V. Rode*

Tetrahedron: Asymmetry 18 (2007) 1210



$C_{17}H_{23}NO_7S$

{(3*R*,4*S*)-3-Hydroxy-*N*-[4-(methylphenyl)sulfonyl]pyrrolidine-3,4-diyl} bis(methylene)diacetate

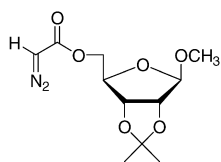
$[\alpha]_D^{20} = +2.9$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-proline catalyzed aldol reaction

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

Vitor F. Ferreira,* Raquel A. C. Leão, Fernando de C. da Silva,
Sergio Pinheiro, Paul Lhoste and Denis Sinou

Tetrahedron: Asymmetry 18 (2007) 1217



$C_{11}H_{16}N_2O_6$

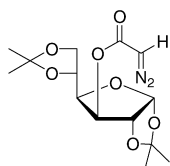
Diazoacetic acid 5-(1-methoxy-2,3-*O*-isopropylidene)-β-*D*-ribofuranose ester

$[\alpha]_D^{20} = -58$ (*c* 1.20, CH_2Cl_2)

Source of chirality: *D*-(-)-ribose

Vitor F. Ferreira,* Raquel A. C. Leão, Fernando de C. da Silva,
Sergio Pinheiro, Paul Lhoste and Denis Sinou

Tetrahedron: Asymmetry 18 (2007) 1217



$C_{14}H_{20}N_2O_7$

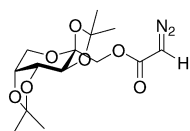
Diazoacetic acid 3-(1,2:5,6-di-*O*-isopropylidene)-α-*D*-glucofuranose ester

$[\alpha]_D^{20} = -36$ (*c* 1.10, CH_2Cl_2)

Source of chirality: *D*-(+)-glucose

Vitor F. Ferreira,* Raquel A. C. Leão, Fernando de C. da Silva,
Sergio Pinheiro, Paul Lhoste and Denis Sinou

Tetrahedron: Asymmetry 18 (2007) 1217



$C_{14}H_{20}N_2O_7$

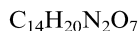
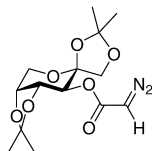
Diazoacetic acid 1-(2,3:4,5-di-*O*-isopropylidene)-β-fructopyranose ester

$[\alpha]_D^{20} = -20$ (*c* 1.50, CH_2Cl_2)

Source of chirality: *D*-(-)-fructose

Vitor F. Ferreira,* Raquel A. C. Leão, Fernando de C. da Silva,
Sergio Pinheiro, Paul Lhoste and Denis Sinou

Tetrahedron: Asymmetry 18 (2007) 1217



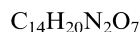
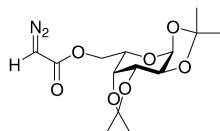
Diazoacetic acid 3-(1,2:4,5-di-*O*-isopropylidene)-β-*D*-fructopyranose ester

$$[\alpha]_D^{20} = -21 \text{ (} c \text{ 1.80, CH}_2\text{Cl}_2 \text{)}$$

Source of chirality: *D*-(-)-fructose

Vitor F. Ferreira,* Raquel A. C. Leão, Fernando de C. da Silva,
Sergio Pinheiro, Paul Lhoste and Denis Sinou

Tetrahedron: Asymmetry 18 (2007) 1217



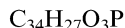
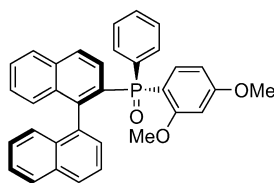
Diazoacetic acid 6-(1,2:3,4-di-*O*-isopropylidene)-α-*D*-galactopyranose ester

$$[\alpha]_D^{20} = -23 \text{ (} c \text{ 1.20, CH}_2\text{Cl}_2 \text{)}$$

Source of chirality: *D*-(+)-galactose

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and
Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



(*R*)-2(*S*)-[(2,4-Dimethoxyphenyl)phenylphosphinyl]-1,1'-binaphthyl

Ee = 99%

$$[\alpha]_D^{25} = -30.25 \text{ (} c \text{ 0.79, CH}_2\text{Cl}_2 \text{)} \text{ or}$$

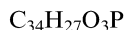
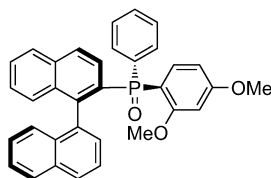
$$[\alpha]_D^{25} = -38.0 \text{ (} c \text{ 0.79, CH}_2\text{Cl}_2 \text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,S*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and
Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



(*R*)-2(*R*)-[(2,4-Dimethoxyphenyl)phenylphosphinyl]-1,1'-binaphthyl

Ee = 99%

$$[\alpha]_D^{25} = -30.25 \text{ (} c \text{ 0.79, CH}_2\text{Cl}_2 \text{)} \text{ or}$$

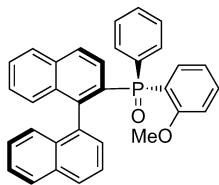
$$[\alpha]_D^{25} = -38.0 \text{ (} c \text{ 0.79, CH}_2\text{Cl}_2 \text{)}$$

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,R*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{33}H_{25}O_2P$

(*R*)-2(*S*)-[(*o*-Anisylphenyl)phosphinyl]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = -33.3$ (*c* 0.75, CH_2Cl_2) or

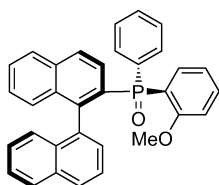
$[\alpha]_D^{25} = -63.1$ (*c* 0.75, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,S*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{33}H_{25}O_2P$

(*R*)-2(*R*)-[(*o*-Anisylphenyl)phosphinyl]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = -33.3$ (*c* 0.75, CH_2Cl_2) or

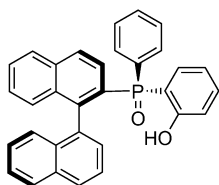
$[\alpha]_D^{25} = -63.1$ (*c* 0.75, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,R*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{32}H_{23}O_2P$

(*R*)-2(*S*)-[(2-Hydroxyphenyl)phenylphosphinyl]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = -19.6$ (*c* 0.72, CH_2Cl_2) or

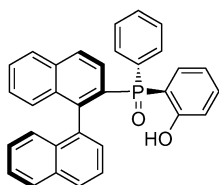
$[\alpha]_D^{25} = -35.5$ (*c* 0.72, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,S*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{32}H_{23}O_2P$

(*R*)-2(*R*)-[(2-Hydroxyphenyl)phenylphosphinyl]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = -19.6$ (*c* 0.72, CH_2Cl_2) or

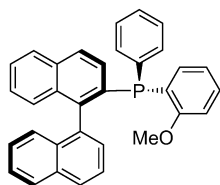
$[\alpha]_D^{25} = -35.5$ (*c* 0.72, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,R*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{33}H_{25}OP$

(*R*)-2(*S*)-[(*o*-Anisylphenyl)phosphino]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = +152$ (*c* 0.5, CH_2Cl_2) or

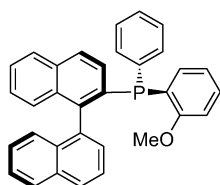
$[\alpha]_D^{25} = +96.3$ (*c* 0.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,S*)

Mohamad Jahjah, Rabih Jahjah, Stéphane Pellet-Rostaing* and Marc Lemaire*

Tetrahedron: Asymmetry 18 (2007) 1224



$C_{33}H_{25}OP$

(*R*)-2(*R*)-[(*o*-Anisylphenyl)phosphino]-1,1'-binaphthyl

Ee = 99%

$[\alpha]_D^{25} = +152$ (*c* 0.5, CH_2Cl_2) or

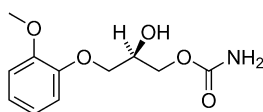
$[\alpha]_D^{25} = +96.3$ (*c* 0.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R,R*)

Alexander A. Bredikhin,* Zemfira A. Bredikhina, Dmitry V. Zakharychev and Alexander V. Pashagin

Tetrahedron: Asymmetry 18 (2007) 1239



$C_{11}H_{15}NO_5$

(*R*)-1-Carbamoyloxy-2-hydroxy-3-(2-methoxyphenoxy)propane; (*R*)-Methocarbamol

Ee = 99.8% [chiral HPLC]

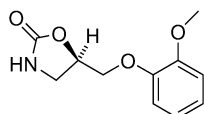
$[\alpha]_D^{20} = -0.6$ (*c* 1.0, MeOH)

Source of chirality: (*S*)-3-(2-methoxyphenoxy)-propane-1,2-diol

Absolute configuration: (*R*)

Alexander A. Bredikhin,* Zemfira A. Bredikhina, Dmitry V. Zakharychev and Alexander V. Pashagin

Tetrahedron: Asymmetry 18 (2007) 1239



$C_{11}H_{13}NO_4$

(*R*)-5-(2-Methoxyphenoxy)methyl-oxazolidin-2-one; (*R*)-Mephenoxalone

Ee = >99.9% [chiral HPLC]

$[\alpha]_D^{20} = -34.4$ (*c* 1.3, EtOH),

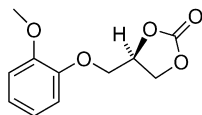
$[\alpha]_D^{20} = -37.2$ (*c* 1.1, EtOH)

Source of chirality: (*R*)-3-(2-methoxyphenoxy)-propane-1,2-diol

Absolute configuration: (*R*)

Alexander A. Bredikhin,* Zemfira A. Bredikhina, Dmitry V. Zakharychev and Alexander V. Pashagin

Tetrahedron: Asymmetry 18 (2007) 1239



$C_{11}H_{12}O_5$

(*R*)-2-(2-Methoxyphenoxy)methyl-[1,3]dioxolan-2-one

Ee = 99.8% [chiral HPLC]

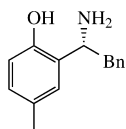
$[\alpha]_D^{20} = +17.7$ (*c* 1.0, EtOH)

Source of chirality: (*S*)-3-(2-methoxyphenoxy)-propane-1,2-diol

Absolute configuration: (*R*)

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Tetrahedron: Asymmetry 18 (2007) 1257



$C_{15}H_{17}NO$

2-((*R*)-1-Amino-2-phenylethyl)-4-methylphenol

Ee >99%

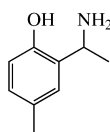
$[\alpha]_D^{20} = -48.0$ (*c* 0.5, MeOH)

Source of chirality: optical resolution

Absolute configuration: (*R*)

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$C_9H_{13}NO$

(-)-2-(1-Aminoethyl)-4-methylphenol

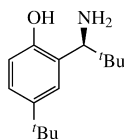
Ee >99%

$[\alpha]_D^{20} = -16.2$ (*c* 0.5, 0.1 M HCl (aq))

Source of chirality: optical resolution

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$C_{15}H_{25}NO$

(*S*)-2-(1-Amino-2,2-dimethylpropyl)-4-*tert*-butylphenol

Ee >99%

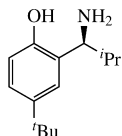
$[\alpha]_D^{20} = -6.8$ (*c* 0.326, diethyl ether)

Source of chirality: (*S*)-2-(1-amino-2,2-dimethylpropyl)phenol

Absolute configuration: (*S*)

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$C_{14}H_{23}NO$

(S)-2-(1-Amino-2-methylpropyl)-4-*tert*-butylphenol

Ee >99%

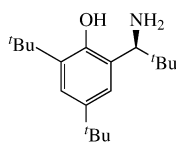
$[\alpha]_D^{20} = -13.9$ (c 0.36, $CHCl_3$)

Source of chirality: (S)-2-(1-amino-2-methylpropyl)phenol

Absolute configuration: (S)

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$C_{19}H_{33}NO$

(S)-2-(1-Amino-2,2-dimethylpropyl)-4,6-di-*tert*-butylphenol

Ee >99%

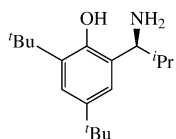
$[\alpha]_D^{20} = +22.0$ (c 0.5, $CH_3COOCH_2CH_3$)

Source of chirality: (S)-2-(1-amino-2,2-dimethylpropyl)phenol

Absolute configuration: (S)

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$C_{18}H_{31}NO$

(S)-2-(1-Amino-2-methylpropyl)-4,6-di-*tert*-butylphenol

Ee >99%

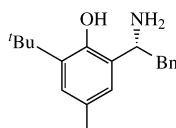
$[\alpha]_D^{20} = +5.8$ (c 0.584, diethyl ether)

Source of chirality: (S)-2-(1-amino-2-methylpropyl)phenol

Absolute configuration: (S)

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$C_{19}H_{25}NO$

(R)-2-(1-Amino-2-phenylethyl)-6-*tert*-butyl-4-methylphenol

Ee >99%

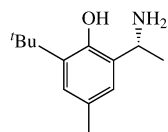
$[\alpha]_D^{20} = -26.1$ (c 1.8, $CHCl_3$)

Source of chirality: 2-((R)-1-amino-2-phenylethyl)-4-methylphenol

Absolute configuration: (R)

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$C_{13}H_{21}NO$

(-)-2-(1-Aminoethyl)-6-*tert*-butyl-4-methylphenol

Ee >99%

$[\alpha]_D^{20} = -21.2$ (c 0.6, $CHCl_3$)

Source of chirality: (-)-2-(1-aminoethyl)-4-methylphenol