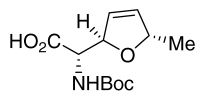


Stereochemistry abstracts

Ayan Bandyopadhyay, Benoy K. Pal, Shital K. Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1875



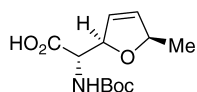
$C_{12}H_{19}NO_5$

(2*S*,2'*R*,5'*S*)-2-(*tert*-Butoxycarbonylamino)-2-(5'-methyl-2',5'-dihydrofuran-2-yl)acetic acid

$[\alpha]_D = +179$ (c 1.51, $CHCl_3$)
Absolute configuration: (2*S*,2'*R*,5'*S*)

Ayan Bandyopadhyay, Benoy K. Pal, Shital K. Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1875



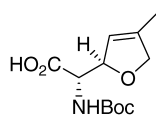
$C_{12}H_{19}NO_5$

(2*S*,2'*R*,5'*R*)-2-(*tert*-Butoxycarbonylamino)-2-(5'-methyl-2',5'-dihydrofuran-2-yl)acetic acid

$[\alpha]_D = +89$ (c 1.30, $CHCl_3$)
Absolute configuration: (2*S*,2'*R*,5'*R*)

Ayan Bandyopadhyay, Benoy K. Pal, Shital K. Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1875



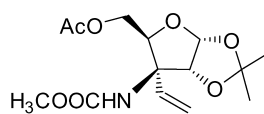
$C_{12}H_{19}NO_5$

(2*S*,2'*R*)-2-(*tert*-Butoxycarbonylamino)-2-(4'-methyl-2',5'-dihydrofuran-2-yl)acetic acid

$[\alpha]_D = +72$ (c 0.21, $CHCl_3$)
Absolute configuration: (2*S*,2'*R*)

Miroslava Martinková,* Jozef Gonda, Jana Raschmanová, Alena Uhríková

Tetrahedron: Asymmetry 19 (2008) 1879



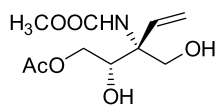
$C_{14}H_{21}NO_7$

5-*O*-Acetyl-3-deoxy-1,2-*O*-isopropylidene-3-(methoxycarbonylamino)-3-*C*-vinyl- α -*D*-xylofuranose

$[\alpha]_D^{20} = +56.1$ (c 0.30, $CHCl_3$)
Source of chirality: *D*-xylose
Absolute configuration: (2*R*,3*R*,4*S*,5*S*)

Miroslava Martinková,* Jozef Gonda, Jana Raschmanová, Alena Uhríková

Tetrahedron: Asymmetry 19 (2008) 1879



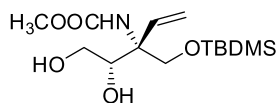
C₁₀H₁₇NO₆

(2*R*,3*S*)-4-*O*-Acetyl-2-(methoxycarbonylamino)-2-vinylbutane-1,3-diol

$[\alpha]_D^{20} = +10.3$ (c 0.34, CHCl₃)
Source of chirality: *D*-xylose
Absolute configuration: (2*R*,3*S*)

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Tetrahedron: Asymmetry 19 (2008) 1879



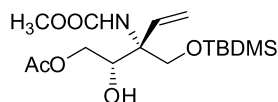
C₁₄H₂₉NO₅Si

(2*R*,3*S*)-1-*O*-(*tert*-Butyldimethylsilyl)-2-(methoxycarbonylamino)-2-vinylbutane-3,4-diol

$[\alpha]_D^{20} = +16.9$ (c 0.32, CHCl₃)
Source of chirality: *D*-xylose
Absolute configuration: (2*R*,3*S*)

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Tetrahedron: Asymmetry 19 (2008) 1879



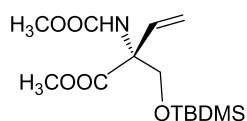
C₁₆H₃₁NO₆Si

(2*R*,3*S*)-4-*O*-Acetyl-1-*O*-(*tert*-butyldimethylsilyl)-2-(methoxycarbonylamino)-2-vinylbutane-3-ol

$[\alpha]_D^{20} = +10.3$ (c 0.34, CHCl₃)
Source of chirality: *D*-xylose
Absolute configuration: (2*R*,3*S*)

Miroslava Martinková,* Jozef Gonda, Jana Raschmanová, Alena Uhríková

Tetrahedron: Asymmetry 19 (2008) 1879



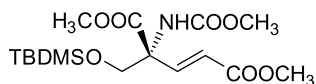
C₁₄H₂₇NO₅Si

Methyl (2*R*)-2-(*tert*-butyldimethylsilyloxymethyl)-2-(methoxycarbonylamino)but-3-enoate

$[\alpha]_D^{20} = -63.7$ (c 0.27, CHCl₃)
Source of chirality: *D*-xylose
Absolute configuration: (2*R*)

Miroslava Martinková,* Jozef Gonda, Jana Raschmanová, Alena Uhríková

Tetrahedron: Asymmetry 19 (2008) 1879



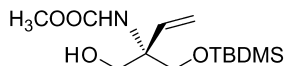
C₁₆H₂₉NO₇Si

Dimethyl (*E,2R*)-2-(*tert*-butyltrimethylsilyloxymethyl)-2-(methoxycarbonylamino)pent-3-enoate

$[\alpha]_D^{20} = -111.1$ (c 0.27, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: (2*R*)

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Tetrahedron: Asymmetry 19 (2008) 1879



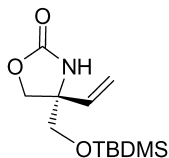
C₁₃H₂₇NO₄Si

(2*S*)-1-*O*-(*tert*-Butyltrimethylsilyl)-2-(methoxycarbonylamino)-2-vinylpropane-3-ol

$[\alpha]_D^{20} = +13.4$ (c 0.42, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: (2*S*)

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Tetrahedron: Asymmetry 19 (2008) 1879



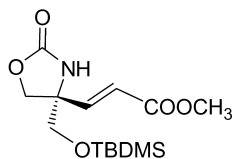
C₁₂H₂₃NO₃Si

(4*S*)-4-(*tert*-Butyltrimethylsilyloxymethyl)-4-vinylloxazolidin-2-one

$[\alpha]_D^{20} = +66.6$ (c 0.36, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: (4*S*)

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Tetrahedron: Asymmetry 19 (2008) 1879



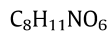
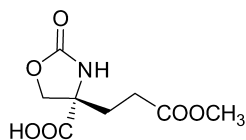
C₁₄H₂₅NO₅Si

Methyl (*E,4S*)-3-[4-(*tert*-butyltrimethylsilyloxymethyl)-2-oxooxazolidin-4-yl]prop-2-enoate

$[\alpha]_D^{20} = +66.7$ (c 0.33, CHCl₃)
Source of chirality: D-xylose
Absolute configuration: (4*S*)

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Tetrahedron: Asymmetry 19 (2008) 1879

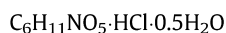
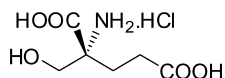


(4S)-4-[2-(Methoxycarbonylethyl)]-2-oxooxazolidine-4-carboxylic acid

$[\alpha]_D^{20} = -31.0$ (c 0.49, $CHCl_3$)
Source of chirality: D-xylose
Absolute configuration: (4S)

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Tetrahedron: Asymmetry 19 (2008) 1879

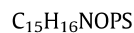
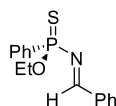


(2R)- α -(Hydroxymethyl)glutamic acid

$[\alpha]_D^{20} = -1.4$ (c 0.45, H_2O)
Source of chirality: D-xylose
Absolute configuration: (2R)

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Tetrahedron: Asymmetry 19 (2008) 1886

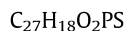
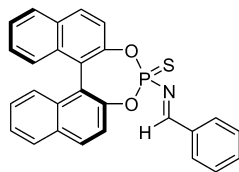


(S)-O-Ethyl N-benzilydene phenylphosphoramidothioate

$[\alpha]_D^{20} = -102.2$ (c 1.0, $CHCl_3$)
Source of chirality: chiral pool
Absolute configuration: (S)

Aidang Lu, Xinyuan Xu, Peng Gao, Zhenghong Zhou,* Haibin Song, Chuchi Tang

Tetrahedron: Asymmetry 19 (2008) 1886

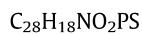
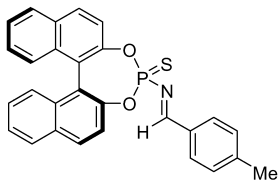


(S)-N-Benzilydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

$[\alpha]_D^{20} = +288.5$ (c 1.0, $CHCl_3$)
Source of chirality: (S)-1,1'-binaphthol
Absolute configuration: (S)

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Tetrahedron: Asymmetry 19 (2008) 1886

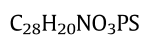
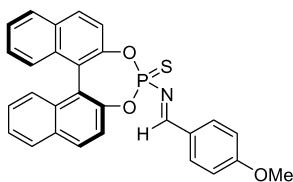


(*S*)-*N*-*p*-Methylbenzelydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

$[\alpha]_D^{20} = +153.9$ (c 1.0, $CHCl_3$)
Source of chirality: (*S*)-1,1'-binaphthol
Absolute configuration: (*S*)

Aidang Lu, Xinyuan Xu, Peng Gao, Zhenghong Zhou,* Haibin Song, Chuchi Tang

Tetrahedron: Asymmetry 19 (2008) 1886

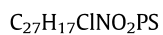
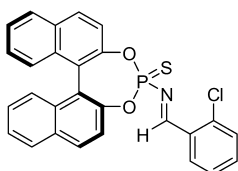


(*S*)-*N*-*p*-Methoxybenzelydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

$[\alpha]_D^{20} = +103.5$ (c 1.0, $CHCl_3$)
Source of chirality: (*S*)-1,1'-binaphthol
Absolute configuration: (*S*)

Aidang Lu, Xinyuan Xu, Peng Gao, Zhenghong Zhou,* Haibin Song, Chuchi Tang

Tetrahedron: Asymmetry 19 (2008) 1886

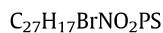
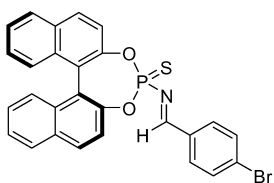


(*S*)-*N*-*o*-Chlorobenzelydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

$[\alpha]_D^{20} = +228.5$ (c 1.0, $CHCl_3$)
Source of chirality: (*S*)-1,1'-binaphthol
Absolute configuration: (*S*)

Aidang Lu, Xinyuan Xu, Peng Gao, Zhenghong Zhou,* Haibin Song, Chuchi Tang

Tetrahedron: Asymmetry 19 (2008) 1886

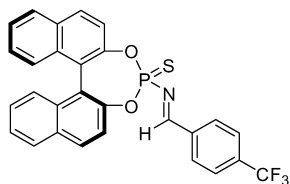


(*S*)-*N*-*p*-Bromobenzelydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

$[\alpha]_D^{20} = +99.5$ (c 1.0, $CHCl_3$)
Source of chirality: (*S*)-1,1'-binaphthol
Absolute configuration: (*S*)

Aidang Lu, Xinyuan Xu, Peng Gao, Zhenghong Zhou,* Haibin Song, Chuchi Tang

Tetrahedron: Asymmetry 19 (2008) 1886



$C_{28}H_{17}F_3NO_2PS$

(*S*)-*N*-*p*-Trifluoromethylbenzeliydene 1,1'-binaphthyl 2,2'-cyclic phosphoramidothioate

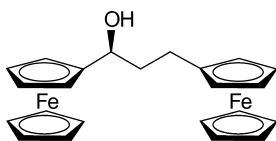
$[\alpha]_D^{20} = +254.4$ (*c* 1.0, $CHCl_3$)

Source of chirality: (*S*)-1,1'-binaphthol

Absolute configuration: (*S*)

Angela Patti*, Sonia Pedotti

Tetrahedron: Asymmetry 19 (2008) 1891



$C_{23}H_{24}Fe_2O$

(*S*)-1,3-Diferrocenyl-1-hydroxypropane

Ee = 97% (by chiral HPLC)

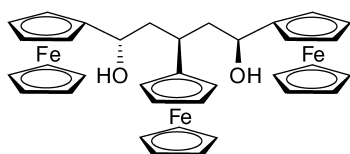
$[\alpha]_D = +18.2$ (*c* 0.7, $CHCl_3$)

Source of chirality: asymmetric reduction of 1,3-diferrocenyl-propan-1-one

Absolute configuration: (*S*)

Angela Patti*, Sonia Pedotti

Tetrahedron: Asymmetry 19 (2008) 1891



$C_{35}H_{36}Fe_3O_2$

(1*S*,5*S*)-1,3,5-Triferrocenyl-1,5-dihydropentane

Ee = 97% (by chiral HPLC)

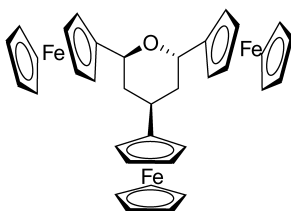
$[\alpha]_D = +2.6$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric reduction of 1,3,5-triferrocenyl-1,5-pentanedione

Absolute configuration: (*S,S*)

Angela Patti*, Sonia Pedotti

Tetrahedron: Asymmetry 19 (2008) 1891



$C_{35}H_{34}Fe_3O$

(*S,S*)-2,4,6-Triferrocenyltetrahydropyrane

Ee = 97%

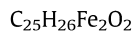
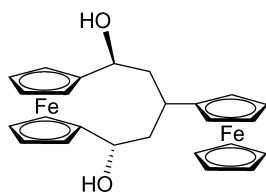
$[\alpha]_D = +7.6$ (*c* 0.4, $CHCl_3$)

Source of chirality: chiral diol

Absolute configuration: (*S,S*)

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Tetrahedron: Asymmetry 19 (2008) 1891

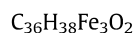
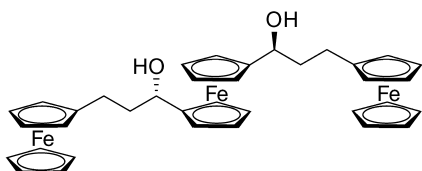


(*S,S*)-1,5-Dihydroxy-3-ferrocenyl[5]ferrocenophane

$E_e = >98\%$ (by chiral HPLC)
 $[\alpha]_D = -11.6$ (c 0.6, $CHCl_3$)
Source of chirality: asymmetric reduction of 1,5-dioxo-3-ferrocenyl[5]ferrocenophane
Absolute configuration: (*S,S*)

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Tetrahedron: Asymmetry 19 (2008) 1891

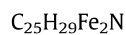
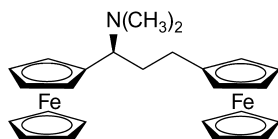


(*S,S*)-1,1'-Bis(3-ferrocenyl-1-hydroxypropyl)ferrocene

$E_e = 98\%$ (by chiral HPLC of corresponding methoxy derivative)
 $[\alpha]_D = -2.7$ (c 0.3, $CHCl_3$)
Source of chirality: asymmetric reduction of 1,1'-bis(3-ferrocenyl-propanoyl)ferrocene
Absolute configuration: (*S,S*)

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Tetrahedron: Asymmetry 19 (2008) 1891

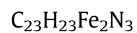
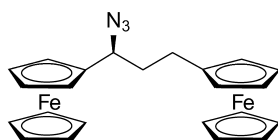


(*S*)-1,3-Diferrocenyl-1-dimethylaminopropane

$E_e = 97\%$
 $[\alpha]_D = +2.3$ (c 0.6, $CHCl_3$)
Source of chirality: chiral precursor
Absolute configuration: (*S*)

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Tetrahedron: Asymmetry 19 (2008) 1891

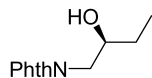


(*S*)-1,3-Diferrocenyl-1-azidopropane

$E_e = 97\%$
 $[\alpha]_D = +27.0$ (c 0.4, $CHCl_3$)
Source of chirality: chiral precursor
Absolute configuration: (*S*)

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee,
Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



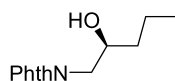
$C_{12}H_{13}NO_3$

N-(2-Hydroxy)-butylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +18.4$ (c 0.5, $CHCl_3$)
Absolute configuration: (S)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee,
Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



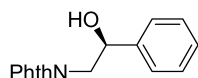
$C_{13}H_{15}NO_3$

N-(2-Hydroxy)-pentylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +10.7$ (c 1, $CHCl_3$)
Absolute configuration: (S)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee,
Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



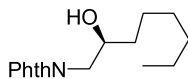
$C_{16}H_{13}NO_3$

N-(2-Hydroxy-2-phenyl)ethylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +23.2$ (c 1, $CHCl_3$)
Absolute configuration: (S)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee,
Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



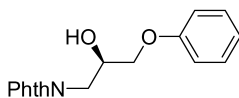
$C_{16}H_{21}NO_3$

N-(2-Hydroxy)-octylphthalimide

Ee = 93.8% (HPLC analysis)
 $[\alpha]_D^{25} = +7.5$ (c 1, $CHCl_3$)
Absolute configuration: (S)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



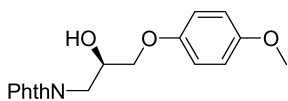
$C_{17}H_{15}NO_4$

N-(2-Hydroxy-3-phenoxy)propylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +23.2$ (c 0.5, $CHCl_3$)
Absolute configuration: (R)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



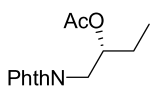
$C_{18}H_{17}NO_5$

N-[2-Hydroxy-3-(p-methoxy-phenoxy)]propylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +25.5$ (c 0.5, $CHCl_3$)
Absolute configuration: (R)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



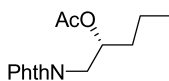
$C_{14}H_{15}NO_4$

N-(2-Acetoxy)-butylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +35.9$ (c 1, $CHCl_3$)
Absolute configuration: (R)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



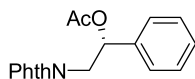
$C_{15}H_{17}NO_4$

N-(2-Acetoxy)-pentylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = +23.5$ (c 1, $CHCl_3$)
Absolute configuration: (R)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



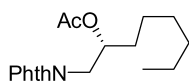
$C_{18}H_{15}NO_4$

N-(2-Acetoxy-2-phenyl)ethylphthalimide

Ee >99% (HPLC analysis)
 $[\alpha]_D^{25} = -21.7$ (c 1, $CHCl_3$)
Absolute configuration: (*R*)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



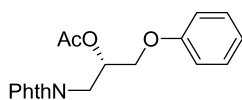
$C_{18}H_{23}NO_4$

N-(2-Acetoxy)octylphthalimide

Ee = 65.3% (HPLC analysis)
 $[\alpha]_D^{25} = +11.1$ (c 1, $CHCl_3$)
Absolute configuration: (*R*)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



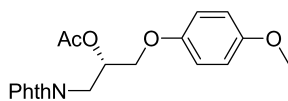
$C_{19}H_{17}NO_5$

N-(2-Acetoxy-3-phenoxy)propylphthalimide

Ee = 51% (HPLC analysis)
 $[\alpha]_D^{25} = -10.5$ (c 1, $CHCl_3$)
Absolute configuration: (*S*)
Source of chirality: enzymatic hydrolysis

Pankaj Gupta, Subhash C. Taneja,* Bhahwal A. Shah, Debaraj Mukherjee, Rajinder Parshad, Swapandeep S. Chimni, Ghulam N. Qazi

Tetrahedron: Asymmetry 19 (2008) 1898



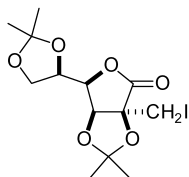
$C_{20}H_{19}NO_6$

N-(2-Acetoxy-3-(*p*-methoxy-phenoxy)propyl)phthalimide

Ee = 99% (HPLC analysis)
 $[\alpha]_D^{25} = -14.4$ (c 0.5, $CHCl_3$)
Absolute configuration: (*S*)
Source of chirality: enzymatic hydrolysis

Nigel A. Jones, Devendar Rao, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{19}IO_6$

2,3:5,6-Di-O-isopropylidene-2-C-iodomethyl-D-mannono-1,4-lactone

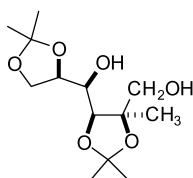
Ee = 100%

$[\alpha]_D^{22} = +31.8$ (c 1.09, $CHCl_3$)

Source of chirality: D-fructose as starting material

Nigel A. Jones, Devendar Rao, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{24}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-mannitol

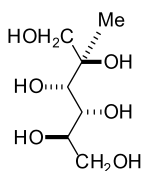
Ee = 100%

$[\alpha]_D^{22} = -2.8$ (c 1.02, $CHCl_3$)

Source of chirality: D-fructose as starting material

Nigel A. Jones, Devendar Rao, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_7H_{16}O_6$

2-C-Methyl-D-mannitol

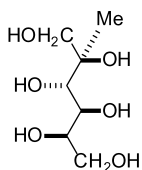
Ee = 100%

$[\alpha]_D^{21} = -8.0$ (c 1.02, MeOH)

Source of chirality: D-fructose as starting material

Nigel A. Jones, Devendar Rao, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_7H_{16}O_6$

2-C-Methyl-D-talitol

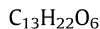
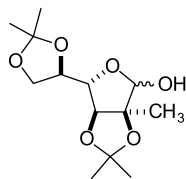
Ee = 100%

$[\alpha]_D^{21} = -17.2$ (c 1.0, water)

Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904

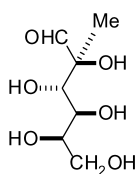


2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-talofuranose

Ee = 100%
 $[\alpha]_D^{22} = -15.2$ (c 1.0, $CHCl_3$)
Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904

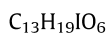
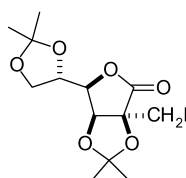


2-C-Methyl-D-talose

Ee = 100%
 $[\alpha]_D^{22} = +11.8$ (c 2.0, water)
Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904

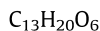
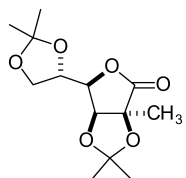


2,3:5,6-Di-O-isopropylidene-2-C-iodomethyl-L-gulono-1,4-lactone

Ee = 100%
 $[\alpha]_D^{24} = +27.8$ (c 1.07, $CHCl_3$)
Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904

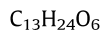
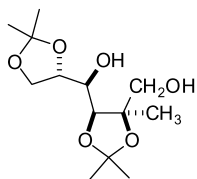


2,3:5,6-Di-O-isopropylidene-2-C-methyl-L-gulono-1,4-lactone

Ee = 100%
 $[\alpha]_D^{24} = +59.0$ (c 1.09, $CHCl_3$)
Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



2,3:5,6-Di-O-isopropylidene-2-C-methyl-L-gulitol

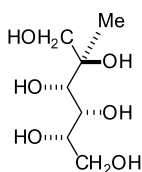
Ee = 100%

$[\alpha]_D^{22} = -7.3$ (c 1.52, $CHCl_3$)

Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



2-C-Methyl-L-gulitol

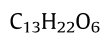
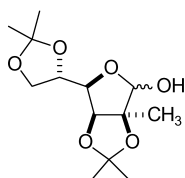
Ee = 100%

$[\alpha]_D^{22} = -9.7$ (c 0.76, water)

Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



2,3:5,6-Di-O-isopropylidene-2-C-methyl-L-gulofuranose

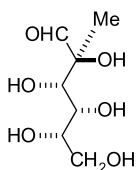
Ee = 100%

$[\alpha]_D^{22} = -1.0$ (c 1.32, $CHCl_3$)

Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



2-C-Methyl-L-gulose

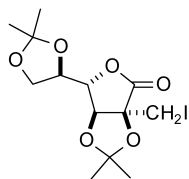
Ee = 100%

$[\alpha]_D^{22} = +12.0$ (c 1.0, water)

Source of chirality: L-sorbose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{19}IO_6$

2,3:5,6-Di-O-isopropylidene-2-C-iodomethyl-D-talono-1,4-lactone

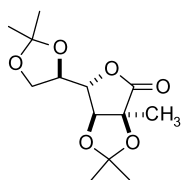
Ee=100%

$[\alpha]_D^{22} = -44.5$ (c 1.0, $CHCl_3$)

Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{20}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-talono-1,4-lactone

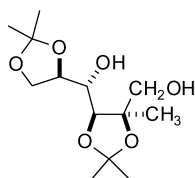
Ee = 100%

$[\alpha]_D^{22} = +15.1$ (c 1.0, $CHCl_3$)

Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{24}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-talitol

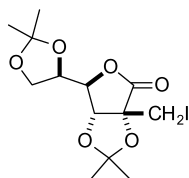
Ee = 100%

$[\alpha]_D^{22} = +11.1$ (c 1.0, $CHCl_3$)

Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{19}IO_6$

2,3:5,6-Di-O-isopropylidene-2-C-iodomethyl-D-allono-1,4-lactone

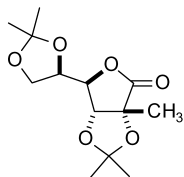
Ee = 100%

$[\alpha]_D^{22} = +32.3$ (c 1.0, $CHCl_3$)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{20}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-allono-1,4-lactone

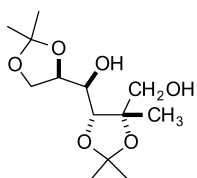
Ee = 100%

$[\alpha]_D^{20} = -50.0$ (c 1.02, $CHCl_3$)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{24}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-allitol

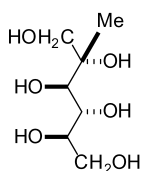
Ee = 100%

$[\alpha]_D^{25} = +7.7$ (c 1.0, $CHCl_3$)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_7H_{16}O_6$

2-C-Methyl-D-allitol

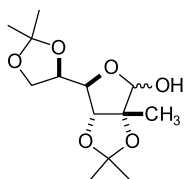
Ee = 100%

$[\alpha]_D^{25} = +12.5$ (c 0.99, MeOH)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



$C_{13}H_{22}O_6$

2,3:5,6-Di-O-isopropylidene-2-C-methyl-D-allofuranose

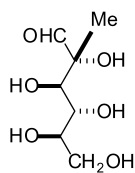
Ee = 100%

$[\alpha]_D^{22} = -1.0$ (c 1.0, $CHCl_3$)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli,
Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek,
Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



2-C-Methyl-D-allose

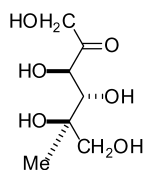
Ee = 100%

$[\alpha]_D^{22} = -3.5$ (c 1.0, water)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli,
Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek,
Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



5-C-Methyl-D-psicose

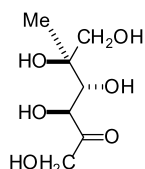
Ee = 100%

$[\alpha]_D^{20} = -25.2$ (c 1.0, water)

Source of chirality: D-tagatose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli,
Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek,
Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



5-C-Methyl-L-psicose

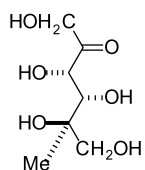
Ee = 100%

$[\alpha]_D^{20} = +24.5$ (c 1.0, water)

Source of chirality: D-psicose as starting material

Nigel A. Jones, Devendar Rao, Akihida Yoshihara, Pushpakiran Gullapalli,
Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek,
Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



5-C-Methyl-D-fructose

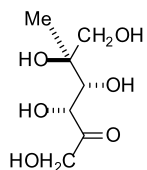
Ee = 100%

$[\alpha]_D^{25} = -85.8$ (c 1.0, water) from D-fructose

$[\alpha]_D^{25} = -85.2$ (c 1.0, water) from L-sorbose

Nigel A. Jones, Devendar Rao, Akihide Yoshihara, Pushpakiran Gullapalli, Kenji Morimoto, Goro Takata, Stuart J. Hunter, Mark R. Wormald, Raymond A. Dwek, Ken Izumori*, George W. J. Fleet*

Tetrahedron: Asymmetry 19 (2008) 1904



5-C-Methyl-L-fructose

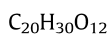
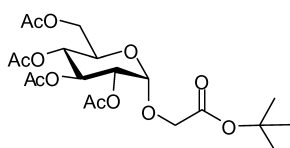
Ee = 100%

$[\alpha]_D^{20} = +83.2$ (c 1.0, water)

Source of chirality: D-psicose as starting material

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranoside

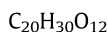
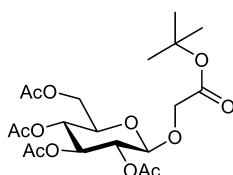
Ee = 100%

$[\alpha]_D = +129$ (c 1.00, CH_2Cl_2)

Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-glucopyranoside

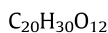
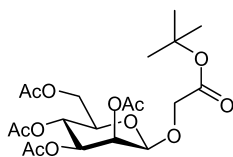
Ee = 100%

$[\alpha]_D = -29$ (c 1.00, CH_2Cl_2)

Source of chirality: β -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-mannopyranoside

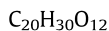
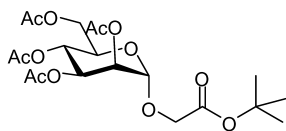
Ee = 100%

$[\alpha]_D = +46$ (c 1.00, CH_2Cl_2)

Source of chirality: β -D-mannopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

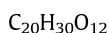
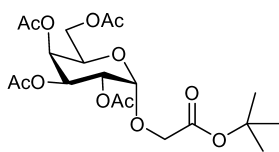


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-mannopyranoside

Ee = 100%
[α]_D = +57 (c 1.00, CH₂Cl₂)
Source of chirality: α -D-mannopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

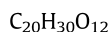
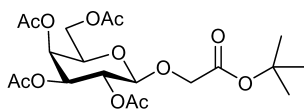


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-galactopyranoside

Ee = 100%
[α]_D = +110 (c 0.50, CH₂Cl₂)
Source of chirality: α -D-galactopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

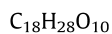
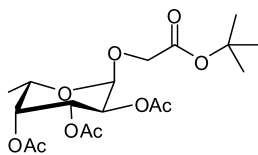


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranoside

Ee = 100%
[α]_D = +110 (c 1.00, CH₂Cl₂)
Source of chirality: β -D-galactopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

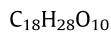
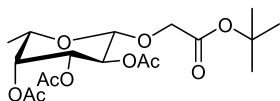


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -L-fucopyranoside

Ee = 100%
[α]_D = -103 (c 3.00, CH₂Cl₂)
Source of chirality: α -L-fucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

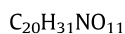
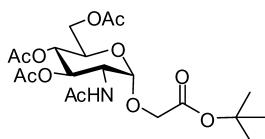


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -L-fucopyranoside

Ee = 100%
[α]_D = +10 (c 2.00, CH₂Cl₂)
Source of chirality: β -L-fucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

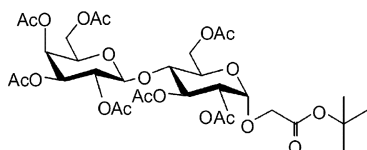


(*tert*-Butyloxycarbonyl)methyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy- α -D-glucopyranoside

Ee = 100%
[α]_D = +73 (c 1.00, CH₂Cl₂)
Source of chirality: 2-amino-2-deoxy-2-*N*-acetyl- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

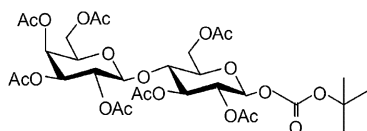


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl-(1→4)-2,3,6-tri-*O*-acetyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +30 (c 1.00, CH₂Cl₂)
Source of chirality: *O*-(β -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

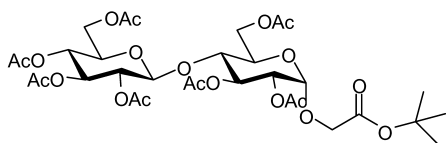


(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl-(1→4)-2,3,6-tri-*O*-acetyl- β -D-glucopyranoside

Ee = 100%
[α]_D = +5 (c 1.00, CH₂Cl₂)
Source of chirality: *O*-(β -D-glucopyranosyl)-(1→4)- β -D-glucopyranoside

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Tetrahedron: Asymmetry 19 (2008) 1919



$C_{32}H_{46}O_{20}$

(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- β -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-*O*-acetyl- α -D-glucopyranoside

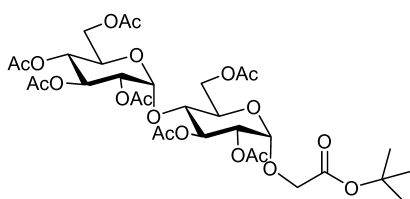
Ee = 100%

$[\alpha]_D = +43$ (c 1.00, CH₂Cl₂)

Source of chirality: *O*-(β -D-glucopyranosyl)-(1 \rightarrow 4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{32}H_{46}O_{20}$

(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-*O*-acetyl- α -D-glucopyranoside

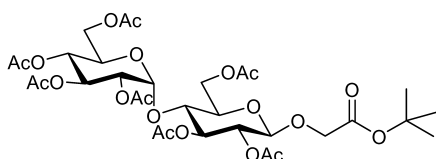
Ee = 100%

$[\alpha]_D = +69$ (c 0.5, CH₂Cl₂)

Source of chirality: *O*-(α -D-glucopyranosyl)-(1 \rightarrow 4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{32}H_{46}O_{20}$

(*tert*-Butyloxycarbonyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-*O*-acetyl- β -D-glucopyranoside

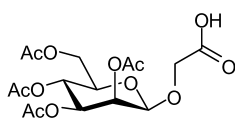
Ee = 100%

$[\alpha]_D = +59$ (c 0.3, CH₂Cl₂)

Source of chirality: *O*-(α -D-glucopyranosyl)-(1 \rightarrow 4)- β -D-glucopyranoside

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Tetrahedron: Asymmetry 19 (2008) 1919



$C_{16}H_{22}O_{12}$

Carboxymethyl 2,3,4,6-tetra-*O*-acetyl- β -D-mannopyranoside

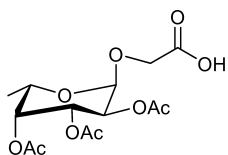
Ee = 100%

$[\alpha]_D = -47$ (c 1.00, CH₂Cl₂)

Source of chirality: β -D-mannopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



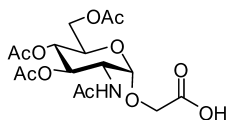
$C_{14}H_{20}O_{10}$

Carboxymethyl 2,3,4,6-tetra-*O*-acetyl- α -L-fucopyranoside

Ee = 100%
[α]_D = -135 (c 1.00, CH₂Cl₂)
Source of chirality: α -L-fucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



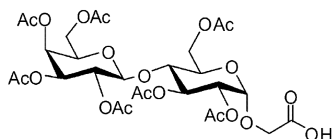
$C_{16}H_{23}NO_{11}$

Carboxymethyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy- α -D-glucopyranoside

Ee = 100%
[α]_D = +81 (c 0.50, CH₂Cl₂)
Source of chirality: 2-amino-2-deoxy-2-*N*-acetyl- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



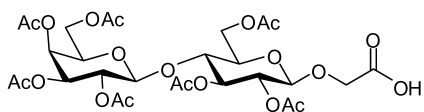
$C_{28}H_{38}O_{20}$

Carboxymethyl 2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl-(1→4)-2,3,6-tri-*O*-acetyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +57 (c 1.00, CH₂Cl₂)
Source of chirality: *O*-(β -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



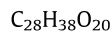
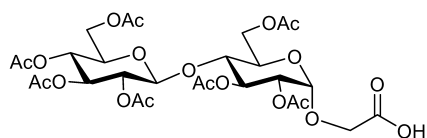
$C_{28}H_{38}O_{20}$

Carboxymethyl 2,3,4,6-tetra-*O*-acetyl- β -D-galactopyranosyl-(1→4)-2,3,6-tri-*O*-acetyl- β -D-glucopyranoside

Ee = 100%
[α]_D = -6 (c 1.00, CH₂Cl₂)
Source of chirality: *O*-(β -D-glucopyranosyl)-(1→4)- β -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



Carboxymethyl 2,3,4,6-tetra-O-acetyl- β -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-O-acetyl- α -D-glucopyranoside

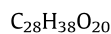
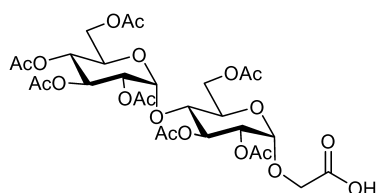
Ee = 100%

$[\alpha]_D = +50$ (c 0.5, CH_2Cl_2)

Source of chirality: O-(β -D-glucopyranosyl)-(1 \rightarrow 4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



Carboxymethyl 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-O-acetyl- α -D-glucopyranoside

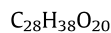
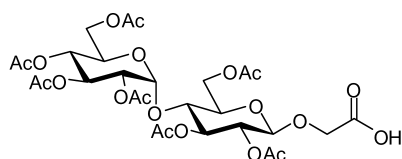
Ee = 100%

$[\alpha]_D = +91$ (c 0.50, CH_2Cl_2)

Source of chirality: O-(α -D-glucopyranosyl)-(1 \rightarrow 4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



Carboxymethyl 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl-(1 \rightarrow 4)-2,3,6-tri-O-acetyl- β -D-glucopyranoside

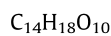
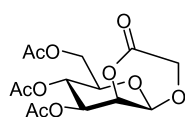
Ee = 100%

$[\alpha]_D = +61$ (c 0.3, CH_2Cl_2)

Source of chirality: O-(α -D-glucopyranosyl)-(1 \rightarrow 4)- β -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



Carboxymethyl-3,4,6-tri-O-acetyl- β -D-mannopyranoside-2-O-lactone

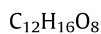
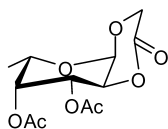
Ee = 100%

$[\alpha]_D = -55$ (c 1.00, CH_2Cl_2)

Source of chirality: β -D-mannopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

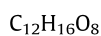
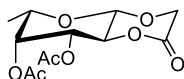


Carboxymethyl-3,4-di-O-acetyl- α -L-fucopyranoside-2-O-lactone

Ee = 100%
[α]_D = -124 (c 1.00, CH₂Cl₂)
Source of chirality: α -L-fucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

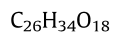
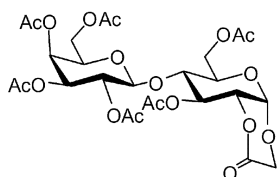


Carboxymethyl-3,4,6-tri-O-acetyl- β -L-fucopyranoside-2-O-lactone

Ee = 100%
[α]_D = -88 (c 1.00, CH₂Cl₂)
Source of chirality: β -D-fucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

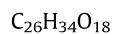
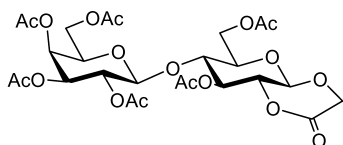


Carboxymethyl 2,3,4,6-tetra-O-acetyl- β -D-galactopyranosyl-(1→4)-3,6-di-O-acetyl- α -D-glucopyranoside-2-O-lactone

Ee = 100%
[α]_D = +68 (c 1.00, CH₂Cl₂)
Source of chirality: O-(β -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

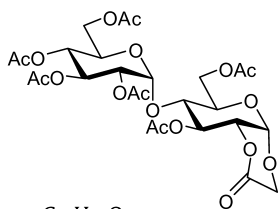


Carboxymethyl 2,3,4,6-tetra-O-acetyl- β -D-galactopyranosyl-(1→4)-3,6-di-O-acetyl- β -D-glucopyranoside-2-O-lactone

Ee = 100%
[α]_D = +5 (c 1.00, CH₂Cl₂)
Source of chirality: O-(β -D-glucopyranosyl)-(1→4)- β -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{26}H_{34}O_{18}$

Carboxymethyl 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl-(1→4)-3,6-di-O-acetyl- α -D-glucopyranoside-2-O-lactone

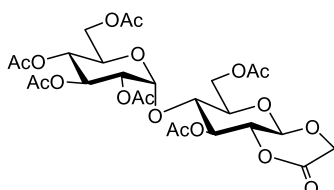
Ee = 100%

$[\alpha]_D = +109$ (c 1.00, CH_2Cl_2)

Source of chirality: O-(α -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{26}H_{34}O_{18}$

Carboxymethyl 2,3,4,6-tetra-O-acetyl- α -D-glucopyranosyl-(1→4)-3,6-di-O-acetyl- β -D-glucopyranoside-2-O-lactone

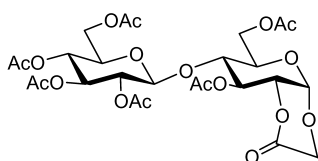
Ee = 100%

$[\alpha]_D = +54$ (c 0.3, CH_2Cl_2)

Source of chirality: O-(α -D-glucopyranosyl)-(1→4)- β -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{26}H_{34}O_{18}$

Carboxymethyl 2,3,4,6-tetra-O-acetyl- β -D-glucopyranosyl-(1→4)-3,6-di-O-acetyl- α -D-glucopyranoside-2-O-lactone

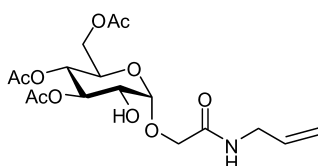
Ee = 100%

$[\alpha]_D = +44$ (c 1.00, CH_2Cl_2)

Source of chirality: O-(β -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



$C_{17}H_{25}NO_{10}$

(N-Allylcarbamoyl)methyl 3,4,6-tri-O-acetyl- α -D-glucopyranoside

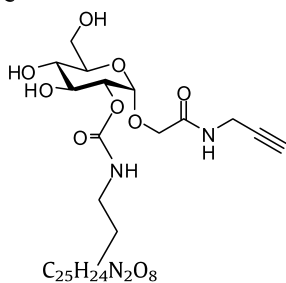
Ee = 100%

$[\alpha]_D = +118$ (c 1.00, CH_2Cl_2)

Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

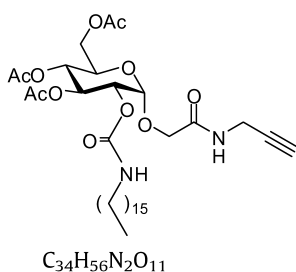


(*N*-Propargylcarbamoyl)methyl 2-*O*-propylcarbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +11 (c 0.3, CH₃OH)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

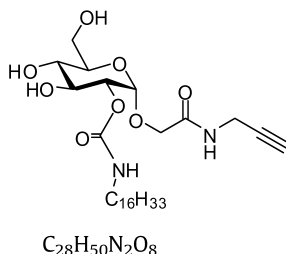


(*N*-Propargylcarbamoyl)methyl 3,4,6-tri-*O*-acetyl-2-*O*-hexadecylcarbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +78 (c 1.00, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

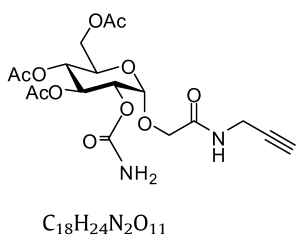


(*N*-Propargylcarbamoyl)methyl 2-*O*-hexadecylcarbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +43 (c 0.50, CH₃OH)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919

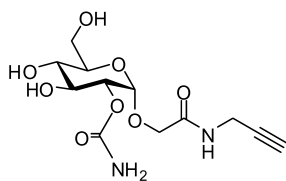


(*N*-Propargylcarbamoyl)methyl 3,4,6-tri-*O*-acetyl-2-*O*-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +98 (c 1.00, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



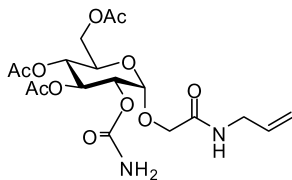
$C_{12}H_{18}N_2O_8$

(*N*-Propargylcarbamoyl)methyl 2-*O*-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +32 (c 0.5, CH₃OH)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



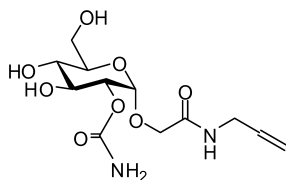
$C_{18}H_{20}N_2O_{11}$

(*N*-Allylcarbamoyl)methyl 3,4,6-tri-*O*-acetyl-2-*O*-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +107 (c 1.00, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



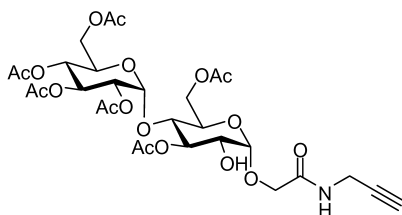
$C_{12}H_{20}N_2O_8$

(*N*-Allylcarbamoyl)methyl 2-*O*-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +51 (c 0.5, CH₃OH)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



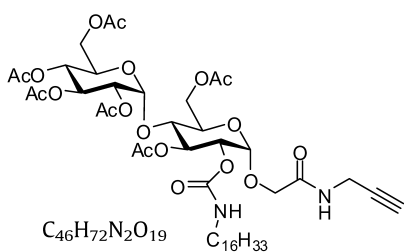
$C_{29}H_{39}N_4O_{18}$

(*N*-Propargylcarbamoyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-(1→4)-3,6-di-*O*-acetyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +107 (c 0.3, CH₂Cl₂)
Source of chirality: *O*-(α -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*N*-Propargylcarbamoyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-(1→4)-3,6-di-*O*-acetyl-2-*O*-hexadecylcarbamoyl- α -D-glucopyranoside

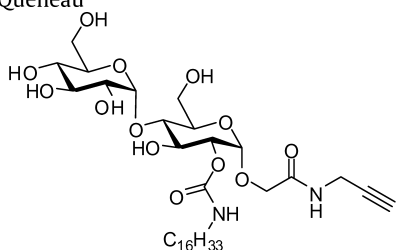
Ee = 100%

$[\alpha]_D = +77$ (c 0.5, CH₂Cl₂)

Source of chirality: *O*-(α -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*N*-Propargylcarbamoyl)methyl α -D-glucopyranosyl-(1→4)-2-*O*-hexadecylcarbamoyl- α -D-glucopyranoside

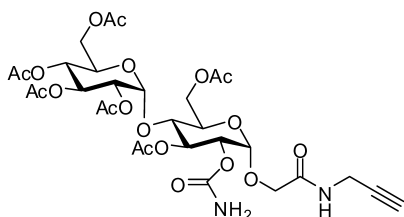
Ee = 100%

$[\alpha]_D = +57$ (c 0.5, CH₃OH)

Source of chirality: *O*-(α -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

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Tetrahedron: Asymmetry 19 (2008) 1919



(*N*-Propargylcarbamoyl)methyl 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl-(1→4)-3,6-di-*O*-acetyl-2-*O*-carbamoyl- α -D-glucopyranoside

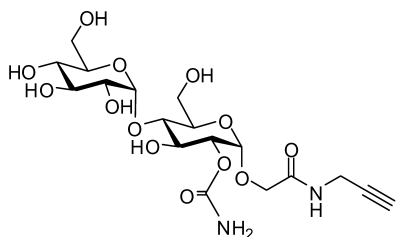
Ee = 100%

$[\alpha]_D = +61$ (c 1.00, CH₂Cl₂)

Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



(*N*-Propargylcarbamoyl)methyl α -D-glucopyranosyl-(1→4)-2-*O*-carbamoyl- α -D-glucopyranoside

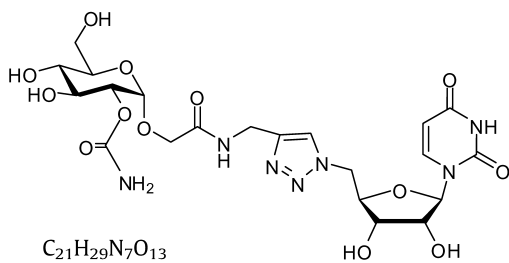
Ee = 100%

$[\alpha]_D = +11$ (c 0.3, CH₂Cl₂)

Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



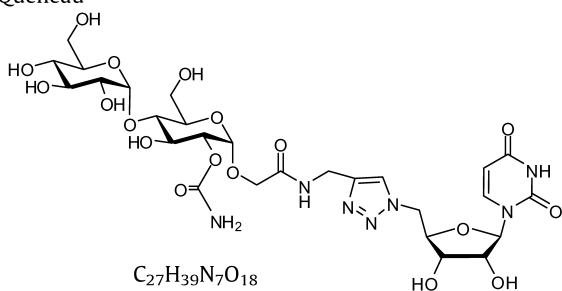
$C_{21}H_{29}N_7O_{13}$

N-methyl[4-[1-(5'-deoxyuridin)-1,2,3-triazole]]-carboxymethyl-2-O-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +50 (c 0.3, H₂O)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



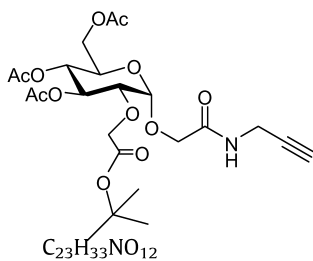
$C_{27}H_{39}N_7O_{18}$

N-methyl[4-[1-(5'-deoxyuridin)-1,2,3-triazole]]-carboxymethyl α -D-glucopyranosyl-(1→4)-2-O-carbamoyl- α -D-glucopyranoside

Ee = 100%
[α]_D = +105 (c 0.3, CH₃OH)
Source of chirality: O-(α -D-glucopyranosyl)-(1→4)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



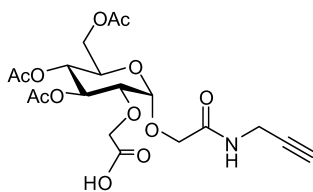
$C_{23}H_{33}NO_{12}$

(N-Propargylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-O-[(*tert*-butyloxycarbonyl)methyl]- α -D-glucopyranoside

Ee = 100%
[α]_D = +75 (c 0.5, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

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Tetrahedron: Asymmetry 19 (2008) 1919



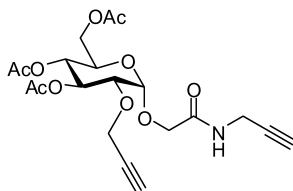
$C_{19}H_{25}NO_{12}$

(N-Propargylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-O-[(carboxy)methyl]- α -D-glucopyranoside

Ee = 100%
[α]_D = +58 (c 0.3, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



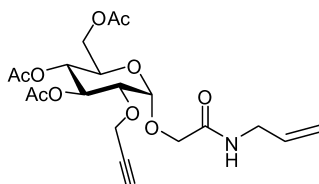
Ee = 100%
[α]_D = +36 (c 0.3, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

C₂₀H₂₅N₂O₁₀

(N-Propargylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-O-(propargyl)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



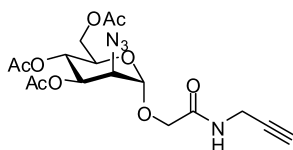
Ee = 100%
[α]_D = +36 (c 0.3, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

C₂₀H₂₇NO₁₀

(N-Allylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-O-(propargyl)- α -D-glucopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



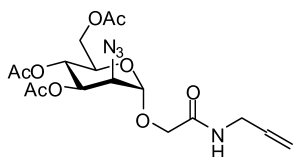
Ee = 100%
[α]_D = +27 (c 0.3, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

C₁₇H₂₂N₄O₉

(N-Propargylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-azido-2-deoxy- α -D-mannopyranoside

Rouba Cheaib, Arkadiusz Listkowski, Stéphane Chambert, Alain Doutheau, Yves Queneau*

Tetrahedron: Asymmetry 19 (2008) 1919



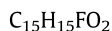
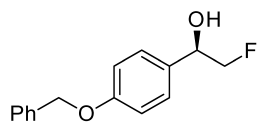
Ee = 100%
[α]_D = +68 (c 0.5, CH₂Cl₂)
Source of chirality: α -D-glucopyranoside

C₁₇H₂₄N₄O₉

(N-Allylcarbamoyl)methyl 3,4,6-tri-O-acetyl-2-azido-2-deoxy- α -D-mannopyranoside

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(*R*)-1-(4-(Benzyloxy)phenyl)-2-fluoroethanol

Ee = 97.0%

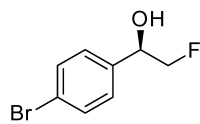
$[\alpha]_D^{25} = -19.9$ (c 0.60, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(*R*)-1-(4-Bromophenyl)-2-fluoroethanol

Ee = 98.5%

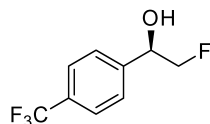
$[\alpha]_D^{25} = -32.3$ (c 0.90, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(*R*)-2-Fluoro-1-(4-(trifluoromethyl)phenyl)ethanol

Ee = 93.0%

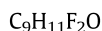
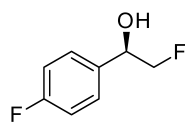
$[\alpha]_D^{25} = -20.0$ (c 0.70, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(*R*)-2-Fluoro-1-(4-fluorophenyl)ethanol

Ee = 99.0%

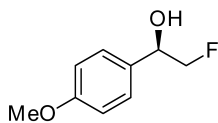
$[\alpha]_D^{25} = -36.5$ (c 0.60, $CHCl_3$)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



C₉H₁₁FO₂

(*R*)-2-Fluoro-1-(4-methoxyphenyl)ethanol

Ee = 99.5%

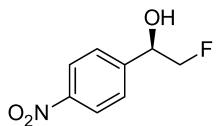
$[\alpha]_D^{25} = -38.5$ (c 0.70, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



C₈H₈FNO₃

(*R*)-2-Fluoro-1-(4-nitrophenyl)ethanol

Ee = 92.5%

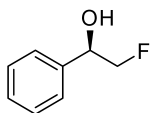
$[\alpha]_D^{25} = -17.7$ (c 0.70, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



C₈H₉FO

(*R*)-2-Fluoro-1-phenylethanol

Ee = 96.5%

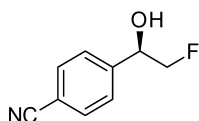
$[\alpha]_D^{25} = -64.4$ (c 1.20, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



C₉H₈FNO

(*R*)-4-(2-Fluoro-1-hydroxyethyl)benzotrile

Ee = 91.5%

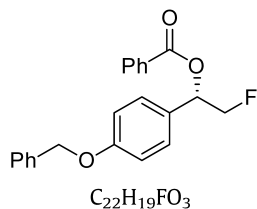
$[\alpha]_D^{25} = -27.1$ (c 0.70, CHCl₃)

Source of chirality: asymmetric reduction

Absolute configuration: (*R*)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(S)-1-(4-(Benzyloxy)phenyl)-2-fluoroethyl benzoate

Ee = 99%

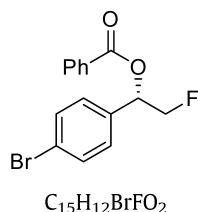
$[\alpha]_D^{25} = -13.9$ (c 1.00, CHCl₃)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(S)-1-(4-Bromophenyl)-2-fluoroethyl benzoate

Ee = 94%

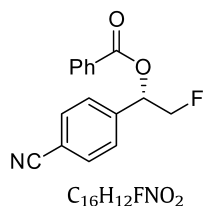
$[\alpha]_D^{25} = -49.5$ (c 0.90, CHCl₃)

Source of chirality: lipase resolution

Absolute configuration: (S)

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Tetrahedron: Asymmetry 19 (2008) 1941



(S)-1-(4-Cyanophenyl)-2-fluoroethyl benzoate

Ee = 90%

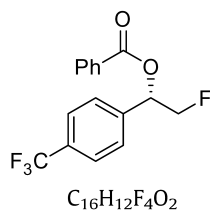
$[\alpha]_D^{25} = -49.5$ (c 0.90, CHCl₃)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



(S)-2-Fluoro-1-(4-(trifluoromethyl)phenyl)ethyl benzoate

Ee = 96%

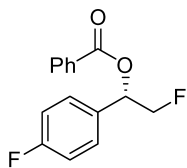
$[\alpha]_D^{25} = -40.3$ (c 1.00, CHCl₃)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



$C_{15}H_{12}F_2O_2$

(S)-2-Fluoro-1-(4-fluorophenyl)ethyl benzoate

Ee = 79%

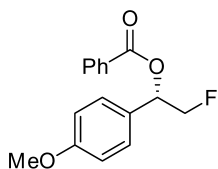
$[\alpha]_D^{25} = -23.3$ (c 0.60, $CHCl_3$)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



$C_{16}H_{15}FO_3$

(S)-2-Fluoro-1-(4-methoxyphenyl)ethyl benzoate

Ee = 73%

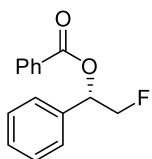
$[\alpha]_D^{25} = -15.0$ (c 0.60, $CHCl_3$)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



$C_{15}H_{13}FO_2$

(S)-2-Fluoro-1-phenylethyl benzoate

Ee = 88%

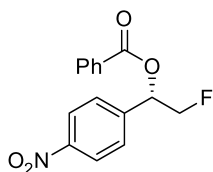
$[\alpha]_D^{25} = -42.2$ (c 0.70, $CHCl_3$)

Source of chirality: lipase resolution

Absolute configuration: (S)

Erik Fuglseth, Eirik Sundby, Per Bruheim, Bård Helge Hoff*

Tetrahedron: Asymmetry 19 (2008) 1941



$C_{15}H_{12}FNO_4$

(S)-2-Fluoro-1-(4-nitrophenyl)ethyl benzoate

Ee = 94%

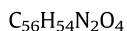
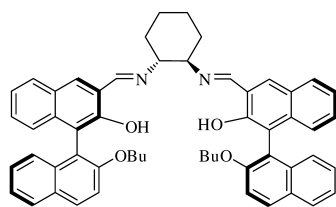
$[\alpha]_D^{25} = -33.4$ (c 0.70, $CHCl_3$)

Source of chirality: lipase resolution

Absolute configuration: (S)

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947



(1*R*,2*R*)-(-)-*N,N'*-Bis((*R*)-1,1'-2-hydroxy-2'-butoxy-3-naphthylidene))-1,2-cyclohexanediamine

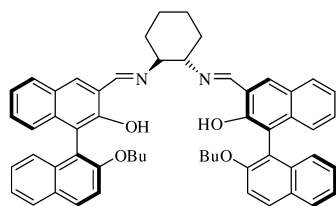
$$[\alpha]_D^{20} = -88 \text{ (c 1.0, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (1*R*,2*R*)-cyclohexanediamine,
(*R*)-BINOL

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

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947



(1*S*,2*S*)-(-)-*N,N'*-Bis((*S*)-1,1'-2-hydroxy-2'-butoxy-3-naphthylidene))-1,2-cyclohexanediamine

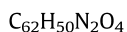
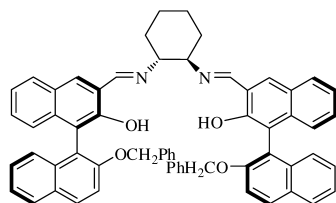
$$[\alpha]_D^{20} = +88 \text{ (c 1.0, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (1*S*,2*S*)-cyclohexanediamine,
(*S*)-BINOL

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

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947



(1*R*,2*R*)-(-)-*N,N'*-Bis((*R*)-1,1'-2-hydroxy-2'-benzyloxy-3-naphthylidene))-1,2-cyclohexanediamine

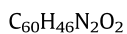
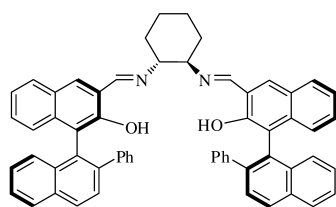
$$[\alpha]_D^{20} = -108 \text{ (c 1.0, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (1*R*,2*R*)-cyclohexanediamine,
(*R*)-BINOL

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

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947



(1*R*,2*R*)-(-)-*N,N'*-Bis((*R*)-1,1'-2-hydroxy-2'-phenyl-3-naphthylidene))-1,2-cyclohexanediamine

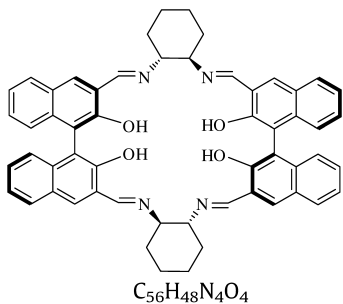
$$[\alpha]_D^{20} = -85 \text{ (c 1.0, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: (1*R*,2*R*)-cyclohexanediamine,
(*R*)-BINOL

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

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947

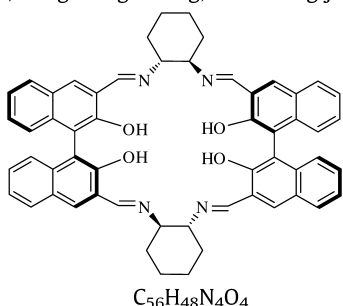


Bis((1*R*,2*R*)-(-)-*N,N'*-(*R*)-1,1'-bi-2-hydroxy-3-naphthylidene)-1,2-cyclohexanediamine

$[\alpha]_D^{20} = -184$ (c 0.5, CH_2Cl_2)
Source of chirality: (1*R*,2*R*)-cyclohexanediamine,
(*R*)-BINOL
Absolute configuration: (*R,R,R,R*)

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947

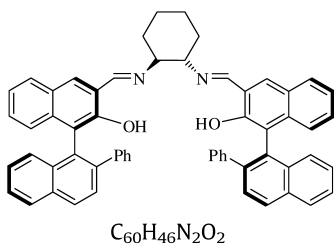


Bis((1*R*,2*R*)-(-)-*N,N'*-(*S*)-1,1'-bi-2-hydroxy-3-naphthylidene)-1,2-cyclohexanediamine

$[\alpha]_D^{20} = -558$ (c 0.5, CH_2Cl_2)
Source of chirality: (1*R*,2*R*)-cyclohexanediamine,
(*S*)-BINOL
Absolute configuration: (*S,R,R,S*)

Lili Jin, Yongzhong Huang, Huanwang Jing,* Tao Chang, Peng Yan

Tetrahedron: Asymmetry 19 (2008) 1947

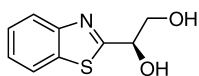


(1*S*,2*S*)-(-)-*N,N'*-Bis((*R*)-1,1'-2-hydroxy-2'-phenyl-3-naphthylidene))-1,2-cyclohexanediamine

$[\alpha]_D^{20} = +197$ (c 0.2, CH_2Cl_2)
Source of chirality: (1*S*,2*S*)-cyclohexanediamine,
(*R*)-BINOL
Absolute configuration: (*R,S,S,R*)

Paula Veronica Podea, Csaba Paizs, Monica Ioana Toşa, Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 1959

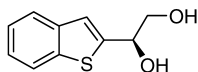


(*R*)-1-(Benzo[*d*]thiazol-2-yl)-ethane-1,2-diol

$[\alpha]_D^{20} = +18.2$, CH_3OH (10 mg mL^{-1})
ee 99% on Chiralpak IB HPLC column
Source of chirality: baker's yeast-mediated biotrans-
formation

Paula Veronica Podea, Csaba Paizs, Monica Ioana Toşa, Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 1959



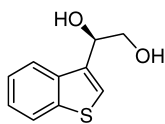
C₁₀H₁₀O₂S

(R)-1-(Benzo[b]thiophen-2-yl)ethane-1,2-diol

$[\alpha]_D^{20} = +12.5$, CH₃OH (10 mg mL⁻¹)
ee 96% on Chiralpak IB HPLC column
Source of chirality: baker's yeast-mediated biotransformation

Paula Veronica Podea, Csaba Paizs, Monica Ioana Toşa, Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 1959



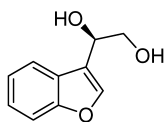
C₁₀H₁₀O₂S

(R)-1-(Benzo[b]thiophen-3-yl)ethane-1,2-diol

$[\alpha]_D^{20} = -50.1$, CH₃OH (10 mg mL⁻¹)
ee 99% on Chiralpak IB HPLC column
Source of chirality: baker's yeast-mediated reduction

Paula Veronica Podea, Csaba Paizs, Monica Ioana Toşa, Florin Dan Irimie*

Tetrahedron: Asymmetry 19 (2008) 1959



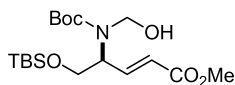
C₁₀H₁₀O₃

(R)-1-(Benzofuran-3-yl)ethane-1,2-diol

$[\alpha]_D^{20} = -25.3$, CH₃OH (10 mg mL⁻¹)
ee 99% on Chiralpak IB HPLC column
Source of chirality: baker's yeast-mediated reduction

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



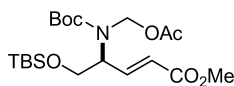
C₁₈H₃₅NO₆Si

Methyl (2*E*,4*S*)-4-[(*N*-*tert*-butoxycarbonyl)-(N-hydroxymethyl)]amino-5-(*tert*-butyldimethylsilyloxy)pent-2-enoate

$[\alpha]_D^{19} = -3.0$ (c 0.11, CHCl₃)
Source of chirality: D-serine
Absolute configuration: (2*E*,4*S*)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



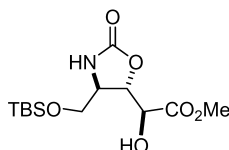
C₂₀H₃₇NO₇Si

Methyl (2E,4S)-4-[(N-acetoxymethyl)-(N-tert-butoxycarbonyl)]amino-5-(tert-butyldimethylsilyloxy)pent-2-enoate

$[\alpha]_D^{19} = +4.8$ (c 0.50, CHCl₃)
Source of chirality: D-serine
Absolute configuration: (2E,4S)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



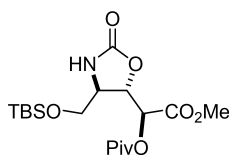
C₁₃H₂₅NO₆Si

Methyl (2S,4'R,5'S)-[4'-(tert-butyldimethylsilyloxymethyl)oxazolidin-2'-on-5'-yl]-2-hydroxyacetate

$[\alpha]_D^{19} = +38.8$ (c 1.00, CHCl₃)
Source of chirality: D-serine and intramolecular
epoxidation
Absolute configuration: (2S,4'R,5'S)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



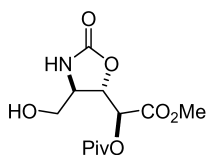
C₁₈H₃₃NO₇Si

Methyl (2S,4'R,5'S)-[4'-(tert-butyldimethylsilyloxy)methyloxazolidin-2'-on-5'-yl]-2-trimethylacetoxymethylacetate

$[\alpha]_D^{18} = +34.7$ (c 0.30, CHCl₃)
Source of chirality: D-serine and intramolecular
epoxidation
Absolute configuration: (2S,4'R,5'S)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



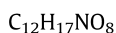
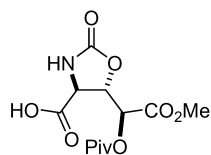
C₁₂H₁₉NO₇

Methyl (2S,4'R,5'S)-[4'-(hydroxymethyl)oxazolidin-2'-on-5'-yl]-2-trimethylacetoxymethylacetate

$[\alpha]_D^{19} = +36.2$ (c 0.10, acetone)
Source of chirality: D-serine and intramolecular epxi-
dation
Absolute configuration: (2S,4'R,5'S)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



(1''S,4'S,5'S)-5'-(1''-Methoxycarbonyl-1''-trimethylacetoxymethyl)oxazolidin-2'-on-4'-yl]formic acid

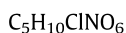
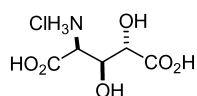
$$[\alpha]_D^{20} = +36.0 (c 0.10, \text{acetone})$$

Source of chirality: D-serine and intramolecular
epoxidation

Absolute configuration: (1''S,4'S,5'S)

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



(2S,3S,4S)-4-Amino-2,3-dihydroxypentanedioic acid hydrochloride

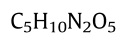
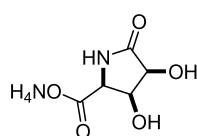
$$[\alpha]_D^{20} = +7.7 (c 0.30, H_2O)$$

Source of chirality: D-serine and intramolecular
epoxidation

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

Hyeonjeong Kim, Dongwon Yoo, Soo Young Choi, Young Keun Chung,
Young Gyu Kim*

Tetrahedron: Asymmetry 19 (2008) 1965



Ammonium (3'S,4'S,5'S)-(3',4'-dihydroxypyrrolidin-2'-one)-5'-yl]formate

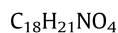
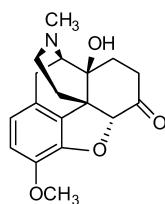
$$[\alpha]_D^{19} = -77.0 (c 0.10, H_2O)$$

Source of chirality: D-serine and intramolecular
epoxidation

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

Minoo Dabiri,* Peyman Salehi,* Gholamreza Kozehgary, Seddigeh Heydari,
Akbar Heydari, Maryam Esfandyari

Tetrahedron: Asymmetry 19 (2008) 1970



(5\alpha)-4,5-Epoxy-14-hydroxy-3-methoxy-17-methylmorphinan-6-one

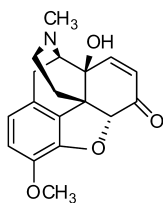
$$[\alpha]_D^{20} = -125 (c 1.0) \text{ HCl form}$$

Source of chirality: enantiomerically pure codeine

Absolute configuration: (5R,9R,13S,14S)

Minoo Dabiri,* Peyman Salehi,* Gholamreza Kozehgary, Seddigeh Heydari, Akbar Heydari, Maryam Esfandyari

Tetrahedron: Asymmetry 19 (2008) 1970



C₁₈H₁₉NO₄

(5α)-7,8-Didehydro-4,5-epoxy-14-hydroxy-3-methoxy-17-methylmorphinan-6-one

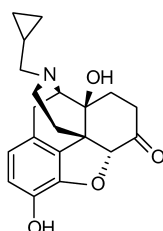
$[\alpha]_D^{20} = -199$ (c 1.0, CHCl₃)

Source of chirality: enantiomerically pure codeine

Absolute configuration: (5R,9R,13S,14S)

Minoo Dabiri,* Peyman Salehi,* Gholamreza Kozehgary, Seddigeh Heydari, Akbar Heydari, Maryam Esfandyari

Tetrahedron: Asymmetry 19 (2008) 1970



C₂₀H₂₃NO₄

(5α)-17-(Cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxymorphinan-6-one

$[\alpha]_D^{20} = -185$ (c 1.0, CHCl₃)

Source of chirality: enantiomerically pure codeine

Absolute configuration: (5R,9R,13S,14S)

Viktória Ujj, József Schindler, Tibor Novák, Mátyás Czugler, Elemér Fogassy, György Keglevich*

Tetrahedron: Asymmetry 19 (2008) 1973



C₁₁H₁₃OP

(+)-(R)-1-Phenyl-3-methyl-3-phospholene 1-oxide

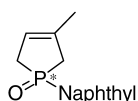
Ee = 96%

$[\alpha]_D^{20} = +35.5$ (c 1, CHCl₃)

Absolute configuration: (R)

Viktória Ujj, József Schindler, Tibor Novák, Mátyás Czugler, Elemér Fogassy, György Keglevich*

Tetrahedron: Asymmetry 19 (2008) 1973



C₁₅H₁₅OP

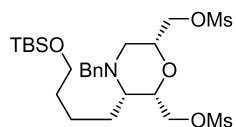
(+)-1-Naphthyl-3-methyl-3-phospholene 1-oxide

Ee = 99%

$[\alpha]_D^{20} = +40.7$ (c 1, CHCl₃)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{25}H_{45}NO_8S_2Si$

(2S,3S,6R)-4-Benzyl-3-(4-*tert*-butyldimethylsilyloxybutyl)-2,6-di(methanesulfonyloxymethyl)morpholine

Ee >95%

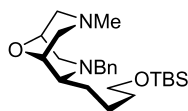
$[\alpha]_D^{22} = -8.0$ (c 0.30, MeOH)

Source of chirality: chiral starting material

Absolute configuration: (2S,3S,6R)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{24}H_{42}N_2O_2Si$

(1R,2S,5S)-3-Benzyl-2-(4-*tert*-butyldimethylsilyloxybutyl)-7-methyl-9-oxa-3,7-diazabicyclo[3.3.1]nonane

Ee >95%

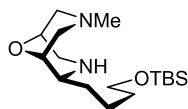
$[\alpha]_D^{22} = +66.9$ (c 0.31, MeOH)

Source of chirality: chiral starting material

Absolute configuration: (1R,2S,5S)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{17}H_{36}N_2O_2Si$

(1R,2S,5R)-2-(4-*tert*-Butyldimethylsilyloxybutyl)-7-methyl-9-oxa-3,7-diazabicyclo[3.3.1]nonane

Ee >98% (according to the corresponding Mosher amides)

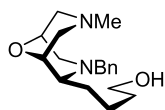
$[\alpha]_D^{22} = +4.0$ (c 0.56, MeOH)

Source of chirality: chiral starting material

Absolute configuration: (1R,2S,5R)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{17}H_{28}N_2O_2$

(1R,2S,5S)-3-Benzyl-2-(4-hydroxybutyl)-7-methyl-9-oxa-3,7-diazabicyclo[3.3.1]nonane

Ee >98%

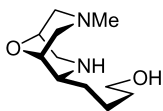
$[\alpha]_D^{22} = +62.2$ (c 0.20, MeOH)

Source of chirality: chiral starting material

Absolute configuration: (1R,2S,5S)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{11}H_{22}N_2O_2$

(1*R*,2*S*,5*R*)-2-(4-Hydroxybutyl)-7-methyl-9-oxa-3,7-diazabicyclo[3.3.1]nonane

Ee >98%

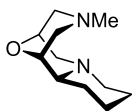
$[\alpha]_D^{22} = +3.7$ (c 0.15, MeOH)

Source of chirality: chiral starting material

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

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{17}H_{36}N_2O_2Si$

(1*R*,2*S*,9*S*)-11-Methyl-13-oxa-7,11-diazatricyclo[7.3.1.0^{2,7}]tridecane

Ee >98%

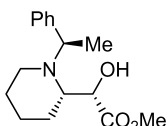
$[\alpha]_D^{22} = +19.0$ (c 1.2, MeOH)

Source of chirality: chiral starting material

Absolute configuration: (1*R*,2*S*,9*S*)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{16}H_{23}NO_3$

Methyl (α *S*,2*S*)- α -hydroxy-1-[(*R*)-1-phenylethyl]piperidine-2-acetate

Ee >96%,

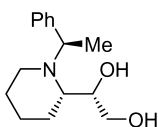
$[\alpha]_D^{22} = -2.0$ (c 0.20, CHCl₃)

Source of chirality: chiral starting material

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

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_{15}H_{23}NO_2$

(β *S*,2*S*)- β -Hydroxy-1-[(*R*)-1-phenylethyl]piperidine-2-ethanol

Ee >96%

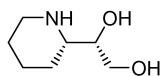
$[\alpha]_D^{22} = +21.2$ (c 0.37, CHCl₃)

Source of chirality: chiral starting material

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

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_7H_{15}NO_2$

($\beta S,2S$)- β -Hydroxypiperidine-2-ethanol

Ee >96%

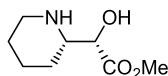
$[\alpha]_D^{22} = -17.7$ (c 0.15, MeOH)

Source of chirality: chiral starting material

Absolute configuration: ($\beta S,2S$)

Matthias Breuning*, Melanie Steiner

Tetrahedron: Asymmetry 19 (2008) 1978



$C_8H_{15}NO_3$

Methyl ($\alpha S,2S$)- α -hydroxypiperidine-2-acetate

Ee >96%

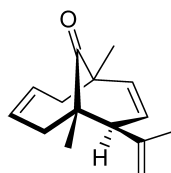
$[\alpha]_D^{22} = -21.2$ (c 0.40, MeOH)

Source of chirality: chiral starting material

Absolute configuration: ($\alpha S,2S$)

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Tetrahedron: Asymmetry 19 (2008) 1984



$C_{15}H_{20}O$

($1S,6R,9S$)-9-Isopropenyl-1,6-dimethylbicyclo[4.3.1]deca-3,7-dien-10-one

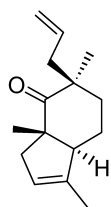
$[\alpha]_D^{23} = -265$ (c 1.1, $CHCl_3$)

Source of chirality: (*R*)-carvone

Absolute configuration: ($1S,6R,9S$)

Adusumilli Srikrishna*, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



$C_{15}H_{22}O$

($1S,3R,6S$)-3-Allyl-1,3,7-trimethylbicyclo[4.3.0]non-7-en-2-one

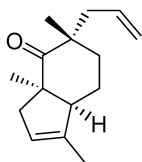
$[\alpha]_D^{23} = +101$ (c 2.8, $CHCl_3$)

Source of chirality: (*R*)-carvone

Absolute configuration: ($1S,3R,6S$)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



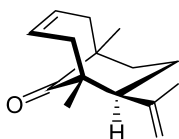
C₁₅H₂₂O

(1R,3S,6S)-3-Allyl-1,3,7-trimethylbicyclo[4.3.0]nona-4,7-dien-2-one

$[\alpha]_D^{23} = -66.6$ (c 1.0, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,3S,6S)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



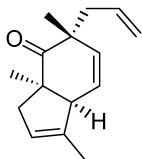
C₁₅H₂₂O

(1R,6R,7S)-7-Isopropenyl-1,6-dimethylbicyclo[4.3.1]dec-3-en-10-one

$[\alpha]_D^{23} = +13.3$ (c 1.1, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,6R,7S)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



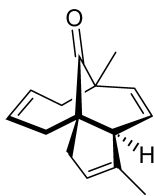
C₁₅H₂₀O

(1R,3R,6S)-3-Allyl-1,3,7-trimethylbicyclo[4.3.0]nona-4,7-dien-2-one

$[\alpha]_D^{22} = -187$ (c 2.4, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,3R,6S)

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Tetrahedron: Asymmetry 19 (2008) 1984



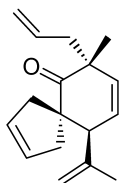
C₁₅H₁₈O

(1R,5S,8R)-4,8-Dimethyltricyclo[6.4.1.0^{1,5}]trideca-3,6,10-trien-13-one

$[\alpha]_D^{26} = -101.8$ (c 1.7, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,5S,8R)

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Tetrahedron: Asymmetry 19 (2008) 1984



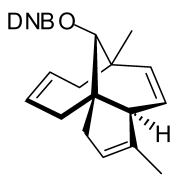
C₁₇H₂₂O

(7R,10S)-7-Allyl-10-isopropenyl-7-methylspiro[4.5]deca-2,8-dien-6-one

$[\alpha]_D^{26} = -366$ (c 2.2, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (7R,10S)

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Tetrahedron: Asymmetry 19 (2008) 1984



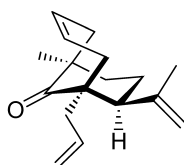
C₂₂H₂₂N₂O₆

(1R,5S,8R,13R)-1,4-Dimethyltricyclo[6.4.1.0¹⁻⁵]trideca-3,6,10-trienyl 3,5-dinitrobenzoate

$[\alpha]_D^{26} = +10.3$ (c 4.3, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,5S,8R,13R)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



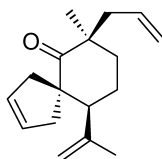
C₁₇H₂₄O

(1R,6R,7S)-6-Allyl-7-isopropenyl-1-methylbicyclo[4.3.1]dec-3-en-10-one

$[\alpha]_D^{24} = -11.3$ (c 1.0, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (1R,6R,7S)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



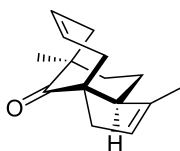
C₁₇H₂₄O

(7R,10S)-7-Allyl-10-isopropenyl-7-methylspiro[4.5]dec-2-en-6-one

$[\alpha]_D^{24} = -52.5$ (c 1.0, CHCl₃)
Source of chirality: (R)-carvone
Absolute configuration: (7R,10S)

Adusumilli Srikrishna *, Vijendra H. Pardeshi, Gedu Satyanarayana

Tetrahedron: Asymmetry 19 (2008) 1984



C₁₅H₂₀O

(1S,5S,8R)-4,8-Dimethyltricyclo[6.4.1.0^{1,5}]trideca-3,10-dien-13-one

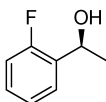
$[\alpha]_D^{24} = +82.6$ (c 1.0, CHCl₃)

Source of chirality: (R)-carvone

Absolute configuration: (1S,5S,8R)

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₈H₉FO

(S)-1-(2'-Fluorophenyl)ethanol

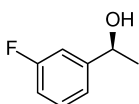
Ee = 96%

$[\alpha]_D^{25} = -43.5$ (c 1.39, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₈H₉FO

(S)-1-(3'-Fluorophenyl)ethanol

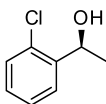
Ee = 40%

$[\alpha]_D^{25} = -24.4$ (c 1.24, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₈H₉ClO

(S)-1-(2'-Chlorophenyl)ethanol

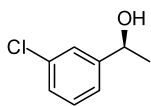
Ee = 97%

$[\alpha]_D^{25} = -57.75$ (c 1.46, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C_8H_9ClO

(S)-1-(3'-Chlorophenyl)ethanol

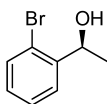
Ee = 48%

$[\alpha]_D^{25} = -28.3$ (c 1.48, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C_8H_9BrO

(S)-1-(2'-Bromophenyl)ethanol

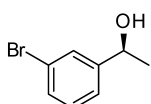
Ee >99%

$[\alpha]_D^{25} = -50.45$ (c 1.33, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C_8H_9BrO

(S)-1-(3'-Bromophenyl)ethanol

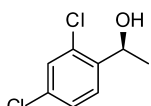
Ee = 60%

$[\alpha]_D^{25} = -25.7$ (c 1.33, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_8H_8Cl_2O$

(S)-1-(2',4'-Dichlorophenyl)ethanol

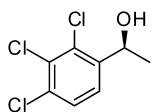
Ee = 94%

$[\alpha]_D^{25} = -52.4$ (c 0.55, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_8H_7Cl_3O$

(S)-1-(2',3',4'-Trichlorophenyl)ethanol

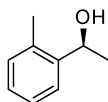
Ee = 92%

$[\alpha]_D^{25} = -42.9$ (c 0.21, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_9H_{12}O$

(S)-1-(2'-Methylphenyl)ethanol

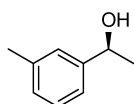
Ee >99%

$[\alpha]_D^{25} = -71.9$ (c 1.06, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_9H_{12}O$

(S)-1-(3'-Methylphenyl)ethanol

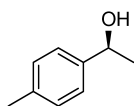
Ee = 33%

$[\alpha]_D^{25} = -34.5$ (c 1.18, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_9H_{12}O$

(S)-1-(4'-Methylphenyl)ethanol

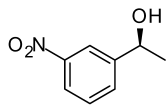
Ee = 72%

$[\alpha]_D^{25} = -45.4$ (c 1.26, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_8H_9NO_3$

(S)-1-(3'-Nitrophenyl)ethanol

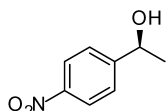
Ee = 10%

$[\alpha]_D^{25} = -4.9$ (c 1.22, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_8H_9NO_3$

(S)-1-(4'-Nitrophenyl)ethanol

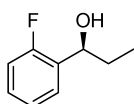
Ee = 65%

$[\alpha]_D^{25} = -22.44$ (c 1.42, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_9H_{11}FO$

(S)-1-(2'-Fluorophenyl)propanol

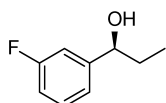
Ee = 92%

$[\alpha]_D^{25} = -32.3$ (c 1.16, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



$C_9H_{11}FO$

(S)-1-(3'-Fluorophenyl)propanol

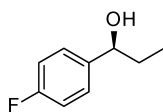
Ee = 79%

$[\alpha]_D^{25} = -31.3$ (c 1.13, $CHCl_3$)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁FO

(S)-1-(4'-Fluorophenyl)propanol

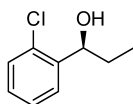
Ee = 85%

$[\alpha]_D^{25} = -37.7$ (c 0.75, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁FCIO

(S)-1-(2'-Chlorophenyl)propanol

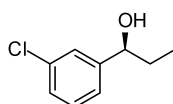
Ee = 96%

$[\alpha]_D^{25} = -33.8$ (c 1.24, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁ClO

(S)-1-(3'-Chlorophenyl)propanol

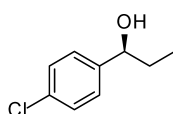
Ee = 75%

$[\alpha]_D^{25} = -29.7$ (c 1.14, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁ClO

(S)-1-(4'-Chlorophenyl)propanol

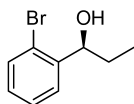
Ee = 95%

$[\alpha]_D^{25} = -38.4$ (c 1.09, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁BrO

(S)-1-(2'-Bromophenyl)propanol

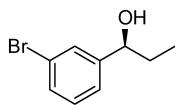
Ee >99%

$[\alpha]_D^{25} = -28.2$ (c 1.17, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁BrO

(S)-1-(3'-Bromophenyl)propanol

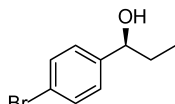
Ee = 86%

$[\alpha]_D^{25} = -24.3$ (c 0.97, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₁BrO

(S)-1-(4'-Bromophenyl)propanol

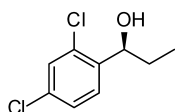
Ee = 95%

$[\alpha]_D^{25} = -30.5$ (c 0.98, CHCl₃)

Source of chirality: microbial reduction

Neeta A. Salvi, Subrata Chattopadhyay*

Tetrahedron: Asymmetry 19 (2008) 1992



C₉H₁₀Cl₂O

(S)-1-(4'-Dichlorophenyl)propanol

Ee = 92%

$[\alpha]_D^{25} = -39.85$ (c 0.27, CHCl₃)

Source of chirality: microbial reduction