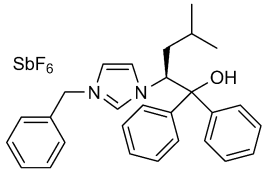
Belén Altava *, Dalgi S. Barbosa, M. Isabel Burguete,
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



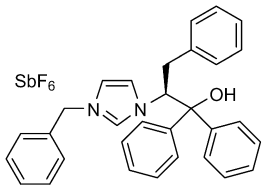
$[\alpha]_D^{20} = +99.8$ (*c*0.009,CH_3OH)
Source of chirality: L-isoleucine
Absolute configuration: (*S*)

$C_{28}H_{31}F_6N_2OSb$

(*S*)-1-Benzyl-3-(1′hydroxy-1′diphenyl-4′-methyl-2′-pentanyl)imidazolium hexafluoroantimonide

Belén Altava *, Dalgi S. Barbosa, M. Isabel Burguete,
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



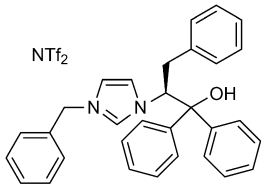
$[\alpha]_D^{20} = +35$ (*c* 0.010,CH_3OH)
Source of chirality: L-phenylalanine
Absolute configuration: (*S*)

$C_{31}H_{29}F_6N_2OSb$

(*S*)-1-Benzyl-3-(1′hydroxy-1′diphenyl-3′phenyl-2′-propanyl)imidazolium hexafluoroantimonide

Belén Altava *, Dalgi S. Barbosa, M. Isabel Burguete,
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



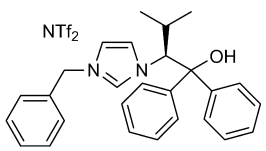
$[\alpha]_D^{20} = +41.4$ (*c* 0.004,CH_3OH)
Source of chirality: L-phenylalanine
Absolute configuration: (*S*)

$C_{33}H_{29}F_6N_3O_5S_2$

(*S*)-1-Benzyl-3-(1′-hydroxy-1′-diphenyl-2′-propanyl)imidazolium triflamide

Belén Altava *, Dalgi S. Barbosa, M. Isabel Burguete,
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



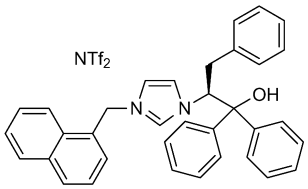
$[\alpha]_D^{20} = +46.9$ (*c* 0.011,CH_3OH)
Source of chirality: L-valine
Absolute configuration: (*S*)

$C_{29}H_{29}F_6N_3O_5S_2$

(*S*)-1-Benzyl-3-(1′-hydroxy-1′-diphenyl-3′-methyl-2′-butanyl)imidazolium triflamide

Belén Altava *, Dalgi S. Barbosa, M. Isabel Burguete,
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



$C_{37}H_{31}F_6N_3O_5S_2$

$[\alpha]_D^{20} = +27.4$ (*c* 0.005,CH_3OH)
Source of chirality: L-phenylalanine
Absolute configuration: (*S*)

(*S*)-1-(1′naphthyl)-methyl-3-(1′-hydroxy-1′diphenyl-3′-phenyl-2′-propanyl)imidazolium triflamide

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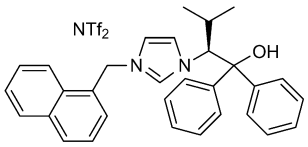
Jorge Escorihuela, Santiago V. Luis *

Tetrahedron: Asymmetry *20 (2009) 999*



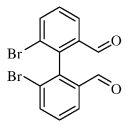
$C_{33}H_{31}F_6N_3O_5S_2$

$[\alpha]_D^{20} = +74.7$ (*c* 0.011,CH_3OH)
Source of chirality: L-valine
Absolute configuration: (*S*)

(*S*)-1-(1′-naphthyl)-methyl-3-(1′-hydroxy-1′-diphenyl-3′-methyl-2′-butanyl)imidazolium triflamide

Quentin Perron, Jezabel Praz, Alexandre Alexakis *

Tetrahedron: Asymmetry *20 (2009) 1004*



$C_{14}H_8Br_2O_2$
2,2′-Dibromo-6,6′-diformylbiphenyl

Ee = 50%
$[\alpha]_D^{20} = -29.9$ (*c* 0.985, $CHCl_3$)
Source of chirality: asymmetric synthesis

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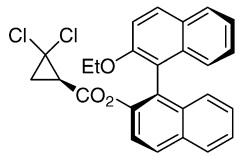
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{26}H_{20}Cl_2O_3$
(1*R*)-[(*R*)-2′-Ethoxy-1,1′-binaphth-2-yl] 2,2-dichlorocyclopropanecarboxylate

$[\alpha]_D^{23} = +34.1$ (*c* 1.80, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*R*)-[(*R*)]

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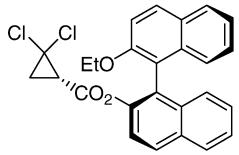
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{26}H_{20}Cl_2O_3$

(1*S*)-[(*R*)-2′-Ethoxy-1,1′-binaphth-2-yl] 2,2-dichlorocyclopropanecarboxylate

$[\alpha]_D^{23} = -38.6$ (*c* 0.90, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*S*)-[(*R*)]

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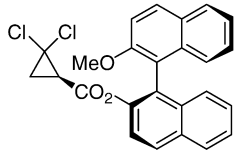
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{25}H_{18}C_{l2}O_3$

(1*R*)-[(*R*)-2′-Methoxy-1,1′-binaphth-2-yl] 2,2-dichlorocyclopropanecarboxylate

$[\alpha]_D^{23} = +36.9$ (*c* 1.35, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monomethyl ether
Absolute configuration: (1*R*)-[(*R*)]

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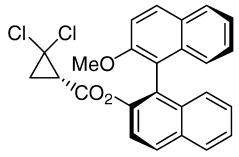
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{25}H_{18}C_{l2}O_3$

(1*S*)-[(*R*)-2′-Methoxy-1,1′-binaphth-2-yl] 2,2-dichlorocyclopropanecarboxylate

$[\alpha]_D^{24} = -39.7$ (*c* 4.2, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monomethyl ether
Absolute configuration: (1*S*)-[(*R*)]

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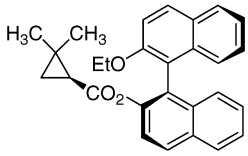
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{28}H_{26}O_3$

(1*R*)-[(*R*)-2′-Ethoxy-1,1′-binaphth-2-yl] 2,2-dimethylcyclopropanecarboxylate

$[\alpha]_D^{25} = +7.4$ (*c* 1.00, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*R*)-[(*R*)]

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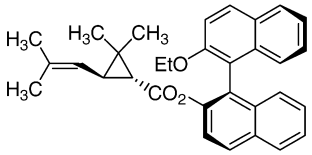
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{32}H_{32}O_3$

(1*R*,3*R*)-[(*R*)-2′-Ethoxy-1,1′-binaphth-2-yl]3-(2′,2′-dimethylethenyl)-2,2-dimethylcyclopropanecarboxylate

$[\alpha]_D^{24} = +88.5$ (*c* 1.00, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*R*,3*R*)-[(*R*)]

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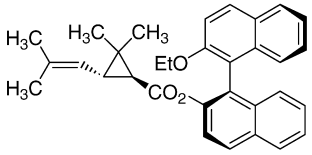
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{32}H_{32}O_3$

(1*S*,3*S*)-[(*R*)-2′-Ethoxy-1,1′-binaphth-2-yl]3-(2′,2′-dimethylethenyl)-2,2-dimethylcyclopropanecarboxylate

$[\alpha]_D^{23} = -53.5$ (*c* 1.35, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*S*,3*S*)-[(*R*)]

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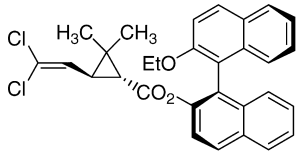
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{30}H_{26}Cl_2O_3$

(1*R*,3*S*)-[(*R*)-2′-Ethoxy-1,1′binaphth-2-yl] 3-(2′,2′-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate

$[\alpha]_D^{29} = +77.4$ (*c* 1.00, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol monoethyl ether
Absolute configuration: (1*R*,3*S*)-[(*R*)]

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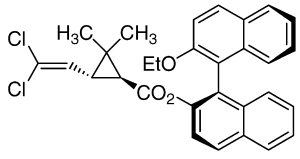
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_{30}H_{26}Cl_2O_3$

(1*S*,3*R*)-[(*R*)-2′-Ethoxy-1,1′binaphth-2-yl] 3-(2′,2′-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate

$[\alpha]_D^{25} = -40.2$ (*c* 4.45, $CHCl_3$)
Source of chirality: (*R*)-1,1′-binaphthol
Absolute configuration: (1*S*,3*R*)-[(*R*)]

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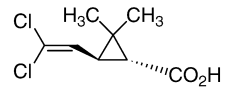
Tetrahedron: Asymmetry *20 (2009) 1015*



$C_8H_{10}Cl_2O_2$

(1*R*,3*S*)-2,2-Dimethyl-3-(2′,2′-dichloroethenyl)cyclopropanecarboxylic acid

Ee = 99%
$[\alpha]_D^{23} = +25.1$ (*c* 1.10, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,3*S*)

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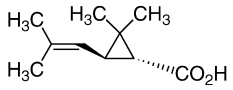
Tetrahedron: Asymmetry *20 (2009) 1015*



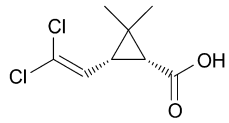
$C_{10}H_{16}O_2$

(1*R*,3*S*)-2,2-Dimethyl-3-(2′,2′-dimethylethenyl)cyclopropanecarboxylic acid

Ee = 98%
$[\alpha]_D^{23} = -38.6$ (*c* 0.90, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,3*S*)

Wolfgang Bicker *, Karol Kacprzak *, Marcin Kwit, Michael Lämmerhofer, Jacek Gawronski, Wolfgang Lindner

Tetrahedron: Asymmetry *20 (2009) 1027*



$C_8H_{10}Cl_2O_2$

(1*R*,3*R*)-3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid

Ee = 99.8%
$[\alpha]_{365}^{20} = +176.6$, $[\alpha]_{436}^{20} = +90.7$, $[\alpha]_{546}^{20} = +45.3$,
$[\alpha]_{589}^{20} = +36.5$ (*c* 1.5, CH_2Cl_2)
Source of chirality: stereoselective chromatography
Absolute configuration: (1*R*,3*R*)

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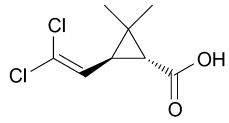
Tetrahedron: Asymmetry *20 (2009) 1027*



$C_8H_{10}Cl_2O_2$

(1*R*,3*S*)-3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid

Ee = 99.2%
$[\alpha]_{365}^{20} = +154.7$, $[\alpha]_{436}^{20} = +90.6$, $[\alpha]_{546}^{20} = +49.2$,
$[\alpha]_{589}^{20} = +40.3$ (*c* 1.5, CH_2Cl_2)
Source of chirality: stereoselective chromatography
Absolute configuration: (1*R*,3*S*)

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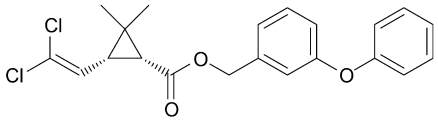
Tetrahedron: Asymmetry *20 (2009) 1027*



$C_{21}H_{20}Cl_2O_3$

3-Phenoxybenzyl (1*R*,3*R*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ee = 99.7%
$[\alpha]_{365}^{20} = +19.7$, $[\alpha]_{436}^{20} = +8.5$, $[\alpha]_{546}^{20} = +3.7$, $[\alpha]_{589}^{20} = +2.6$ (*c* 1.5, CH_2Cl_2)
Source of chirality: synthesis from (1*R*,3*R*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid
Absolute configuration: (1*R*,3*R*)

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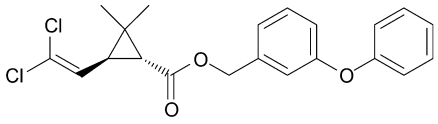
Tetrahedron: Asymmetry *20 (2009) 1027*



$C_{21}H_{20}Cl_2O_3$

3-Phenoxybenzyl (1*R*,3*S*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Ee = 99.3%
$[\alpha]_{365}^{20} = -45.3$, $[\alpha]_{436}^{20} = -20.5$, $[\alpha]_{546}^{20} = -9.6$, $[\alpha]_{589}^{20} = -8.0$ (*c* 1.5, CH_2Cl_2)
Source of chirality: synthesis from (1*R*,3*S*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid
Absolute configuration: (1*R*,3*S*)

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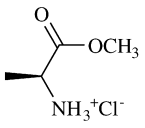
Tetrahedron: Asymmetry *20 (2009) 1036*



$C_4H_{10}ClNO_2$

L-(*S*)-Alanine methyl ester hydrochloride

$[\alpha]_D^{20} = +4.1$ (*c* 9.83, CH_3OH)
Absolute configuration: (*S*)

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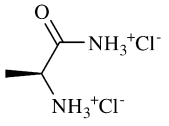
Tetrahedron: Asymmetry *20 (2009) 1036*



$C_3H_{10}Cl_2N_2O$

L-(*S*)-Alanylamide

$[\alpha]_D^{20} = +10.0$ (*c* 9.33, CH_3OH)
Absolute configuration: (*S*)

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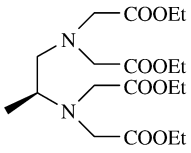
Tetrahedron: Asymmetry *20 (2009) 1036*

$[\alpha]_D^{20} = +1.4$ (*c* 8.53, $CHCl_3$)
Absolute configuration: (*S*)



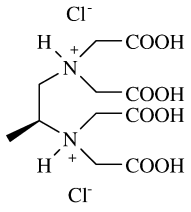
$C_{15}H_{34}N_2O_8$

(*S*)-*N*,*N*,*N*′,*N*′-Tetrakis[(ethoxy-carbonyl)methyl]-1,2-diaminopropane

Nicola Florini *, Gaëlle F. Arnaud, Bálint Kónya, Claudia Zucchi, Gyula Pályi

Tetrahedron: Asymmetry *20 (2009) 1036*

$[\alpha]_D^{20} = +24.7$ (*c* 25.20, CH_3OH)
Absolute configuration: (*S*)



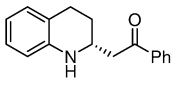
$C_{11}H_{20}Cl_2N_2O_8$

(*S*)-*N*,*N*,*N*′,*N*′-Tetrakis[(hydroxy-carbonyl)methyl]-1,2-diamino-propane dihydrochloride

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -96.6$ (*c* 0.54, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



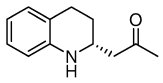
$C_{17}H_{17}NO$

(*R*)-2-(1,2,3,4-Tetrahydroquinolin-2-yl)-1-phenylethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -87.3$ (*c* 1.06, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



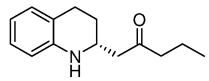
$C_{12}H_{15}NO$

(*R*)-1-(1,2,3,4-Tetrahydroquinolin-2-yl)propan-2-one

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -93.1$ (*c* 1.01, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



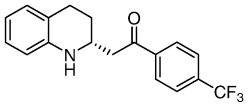
$C_{14}H_{19}NO$

(*R*)-1-(1,2,3,4-Tetrahydroquinolin-2-yl)pentan-2-one

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -80.0$ (*c* 1.12, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



$C_{18}H_{16}F_3NO$

(*R*)-1-(4-(Trifluoromethyl)phenyl)-2-(1,2,3,4-tetrahydroquinolin-2-yl)ethanone

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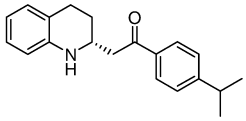
Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -70.3$ (*c* 1.32, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



$C_{20}H_{23}NO$

(*R*)-2-(1,2,3,4-Tetrahydroquinolin-2-yl)-1-(4-isopropylphenyl)ethanone

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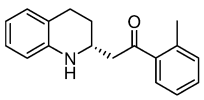
Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -94.9$ (*c* 1.06, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



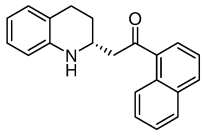
$C_{18}H_{19}NO$

(*R*)-2-(1,2,3,4-Tetrahydroquinolin-2-yl)-1-o-tolylethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -145.7$ (c1.12, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



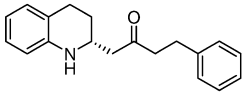
$C_{21}H_{19}NO$

(*R*)-2-(1,2,3,4-Tetrahydroquinolin-2-yl)-1-(naphthalen-1-yl)ethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -57.8$ (c 1.12, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



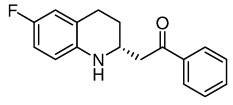
$C_{19}H_{21}NO$

(*R*)-1-(1,2,3,4-Tetrahydroquinolin-2-yl)-4-phenylbutan-2-one

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -48.9$ (c 0.50, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



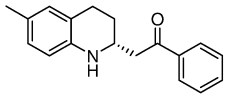
$C_{17}H_{16}FNO$

(*R*)-2-(6-Fluoro-1,2,3,4-tetrahydroquinolin-2-yl)-1-phenylethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -48.7$ (c 0.34, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)



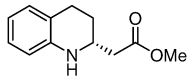
$C_{18}H_{19}NO$

(*R*)-2-(1,2,3,4-Tetrahydro-6-methylquinolin-2-yl)-1-phenylethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -77.2$ (*c* 0.74, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)

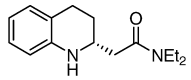


$C_{12}H_{15}NO_2$
(*R*)-Methyl 2-(1,2,3,4-tetrahydroquinolin-2-yl)acetate

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -69.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)

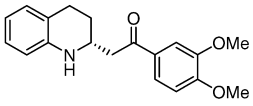


$C_{15}H_{22}N_2O$
(*R*)-*N*,*N*-Diethyl-2-(1,2,3,4-tetrahydroquinolin-2-yl)acetamide

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

$[\alpha]_D = -53.9$ (*c* 1.21, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*R*)

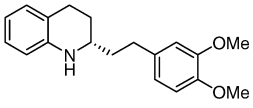


$C_{19}H_{21}NO_3$
(*R*)-2-(1,2,3,4-Tetrahydroquinolin-2-yl)-1-(3,4-dimethoxyphenyl)ethanone

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*

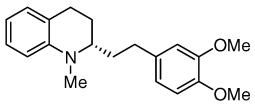
$[\alpha]_D = -59.9$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*S*)



$C_{19}H_{23}NO_2$
(*S*)-2-(3,4-Dimethoxyphenethyl)-1,2,3,4-tetrahydroquinoline

Xiao-Bing Wang, Da-Wei Wang, Sheng-Mei Lu, Chang-Bin Yu, Yong-Gui Zhou *

Tetrahedron: Asymmetry *20 (2009) 1040*



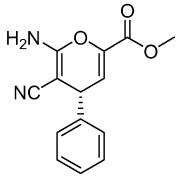
$C_{20}H_{25}NO_2$

(*S*)-2-(3,4-Dimethoxyphenethyl)-1,2,3,4-tetrahydroquinoline

$[\alpha]_D = -27.2$ (*c* 0.87, $CHCl_3$)
Source of chirality: asymmetric hydrogenation
Absolute configuration: (*S*)

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



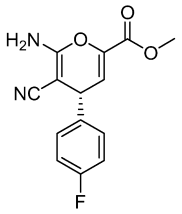
$C_{14}H_{12}N_2O_3$

(*R*)-Methyl 6-amino-5-cyano-4-phenyl-4*H*-pyran-2-carboxylate

Ee = 78%
$[\alpha]_D^{22.1} = -105.6$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



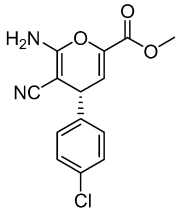
$C_{14}H_{11}FN_2O_3$

(*R*)-Methyl 6-amino-5-cyano-4-(4-fluorophenyl)-4*H*-pyran-2-carboxylate

Ee = 81%
$[\alpha]_D^{22.1} = -68.1$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



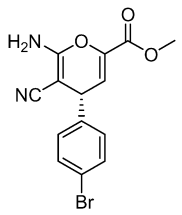
$C_{14}H_{11}ClN_2O_3$

(*R*)-Methyl 6-amino-4-(4-chlorophenyl)-5-cyano-4*H*-pyran-2-carboxylate

Ee = 82%
$[\alpha]_D^{22.1} = -132.4$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



Ee = 88%
$[\alpha]_D^{22.1} = -50.7$ (*c* 1.00, $CHCl_3$);
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{14}H_{11}BrN_2O_3$
(*R*)-Methyl 6-amino-4-(4-bromophenyl)-5-cyano-4*H*-pyran-2-carboxylate

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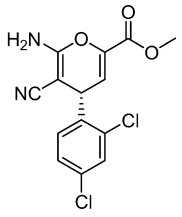
Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



Ee = 88%
$[\alpha]_D^{22.1} = -189.5$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{14}H_{10}Cl_2N_2O_3$
(*S*)-Methyl 6-amino-5-cyano-4-(2,4-dichlorophenyl)-4*H*-pyran-2-carboxylate

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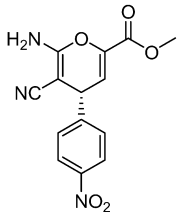
Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



Ee = 72%
$[\alpha]_D^{22.1} = -10.3$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{14}H_{11}N_3O_5$
(*R*)-Methyl 6-amino-5-cyano-4-(4-nitrophenyl)-4*H*-pyran-2-carboxylate

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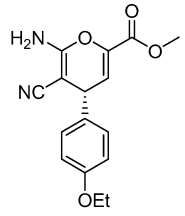
Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*

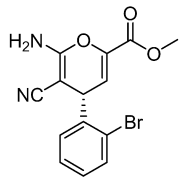


Ee = 85%
$[\alpha]_D^{22.1} = -96.1$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{16}H_{16}N_2O_4$
(*R*)-Methyl 6-amino-5-cyano-4-(4-ethoxyphenyl)-4*H*-pyran-2-carboxylate

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



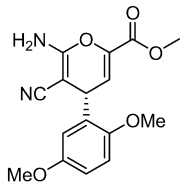
Ee = 83%
$[\alpha]_D^{22.1} = -173.5$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{14}H_{11}BrN_2O_3$

(*S*)-Methyl 6-amino-4-(2-bromophenyl)-5-cyano-4*H*-pyran-2-carboxylate

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



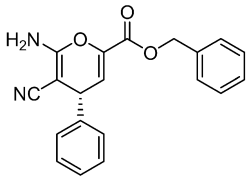
Ee = 80%
$[\alpha]_D^{22.1} = -153.8$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{16}H_{16}N_2O_5$

(*R*)-Methyl 6-amino-5-cyano-4-(2,5-dimethoxyphenyl)-4*H*-pyran-2-carboxylate

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



Ee = 80%
$[\alpha]_D^{22.1} = -55.6$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{20}H_{16}N_2O_3$

(*R*)-Benzyl 6-amino-5-cyano-4-phenyl-4*H*-pyran-2-carboxylate

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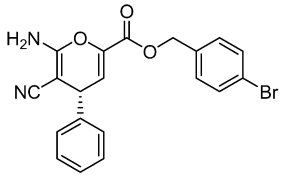
Tetrahedron: Asymmetry *20 (2009) 1046*



Ee = 80%
$[\alpha]_D^{22.1} = -50.1$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

$C_{20}H_{15}BrN_2O_3$

(*R*)-4-Bromobenzyl 6-amino-5-cyano-4-phenyl-4*H*-pyran-2-carboxylate

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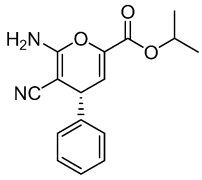
Tetrahedron: Asymmetry *20 (2009) 1046*



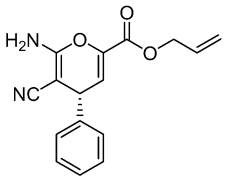
$C_{16}H_{16}N_2O_3$

(*R*)-Isopropyl 6-amino-5-cyano-4-phenyl-4*H*-pyran-2-carboxylate

Ee = 75%
$[\alpha]_D^{22.1} = -63.0$ (*c* 1.00, $CDCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Sheng-Li Zhao, Chang-Wu Zheng, Gang Zhao *

Tetrahedron: Asymmetry *20 (2009) 1046*



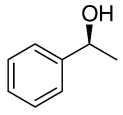
$C_{16}H_{14}N_2O_3$

(*R*)-Allyl 6-amino-5-cyano-4-phenyl-4*H*-pyran-2-carboxylate

Ee = 77%
$[\alpha]_D^{22.1} = -99.5$ (*c* 1.00, $CDCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



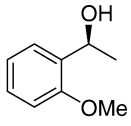
$C_9H_{10}O_2$

(−)-(*S*)-1-Phenylethanol

Ee > 99% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -22.9$ (*c* 1.0, CH_2Cl_2)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



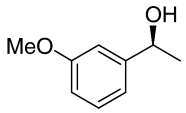
$C_9H_{12}O_2$

(−)-(*S*)-1-(2-Methoxyphenyl)ethanol

Ee > 99% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -17.1$ (*c* 0.75, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



$C_9H_{12}O_2$

(−)-(*S*)-1-(3-Methoxyphenyl)ethanol

Ee 97% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -29.8$ (*c* 0.85, MeOH)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

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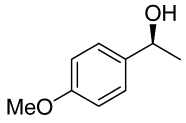
Tetrahedron: Asymmetry *20 (2009) 1057*



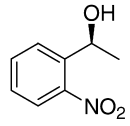
$C_9H_{12}O_2$

(−)-(*S*)-1-(4-Methoxyphenyl)ethanol

Ee 99% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -29.1$ (*c* 1.5, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



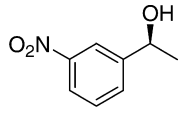
$C_8H_9NO_3$

(+)-(*S*)-1-(2-Nitrophenyl)ethanol

Ee 98% (HPLC, Chiralpak AS)
$[\alpha]_D^{25} = +18.5$ (*c* 0.23, MeOH)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



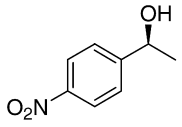
$C_8H_9NO_3$

(−)-(*S*)-1-(3-Nitrophenyl)ethanol

Ee 98% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -20.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

Bartholomeu A. Barros-Filho, Maria da Conceição F. de Oliveira *, Telma L.G. Lemos, Marcos C. de Mattos, Gonzalo de Gonzalo, Vicente Gotor-Fernández, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1057*



$C_8H_9NO_3$

(−)-(*S*)-1-(4-Nitrophenyl)ethanol

Ee > 99% (HPLC, Chiralpak AS)
$[\alpha]_D^{25} = -20.5$ (*c* 1.2, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

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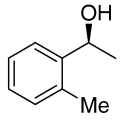
Tetrahedron: Asymmetry *20 (2009) 1057*



$C_9H_{12}O$

(−)-(*S*)-1-(2-Methylphenyl)ethanol

Ee > 99% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -25.1$ (*c* 0.54, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*S*)

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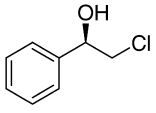
Tetrahedron: Asymmetry *20 (2009) 1057*



C_8H_9ClO

(−)-(*R*)-2-Chloro-1-phenylethanol

Ee 78% (HPLC, Chiralcel OB-H)
$[\alpha]_D^{25} = -42.5$ (*c* 0.87, CH_2Cl_2)
Source of chirality: enzymatic reduction
Absolute configuration: (*R*)

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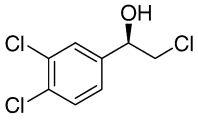
Tetrahedron: Asymmetry *20 (2009) 1057*



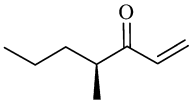
$C_8H_7Cl_3O$

(−)-(*R*)-2-Chloro-1-(3,4-dichlorophenyl)ethanol

Ee 91% (HPLC, Chiralpak IA)
$[\alpha]_D^{25} = -32.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: enzymatic reduction
Absolute configuration: (*R*)

Marlene Espinoza-Moraga, Roxana Cornejo-Morales, Leonardo Silva Santos *

Tetrahedron: Asymmetry *20 (2009) 1062*

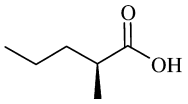


Ee = 95%
$[\alpha]_D$ = +2.0 (*c* 1.0, $CHCl_3$)
Absolute configuration: (*S*)

$C_8H_{14}O$
(*S*)-4-methyl-1-hepten-3-one

Marlene Espinoza-Moraga, Roxana Cornejo-Morales, Leonardo Silva Santos *

Tetrahedron: Asymmetry *20 (2009) 1062*

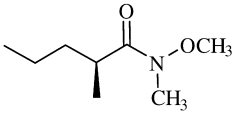


Ee = 95%
$[\alpha]_D$ = +15.8 (*c* 1.0, $CHCl_3$)
Absolute configuration: (*S*)

$C_6H_{12}O_2$
(*S*)-2-methylpentanoic acid

Marlene Espinoza-Moraga, Roxana Cornejo-Morales, Leonardo Silva Santos *

Tetrahedron: Asymmetry *20 (2009) 1062*

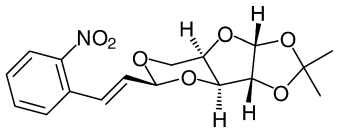


$[\alpha]_D$ = +18.3 (*c* 1.0, $CHCl_3$)
Absolute configuration: (2*S*)

$C_8H_{17}NO_2$
(2*S*)-*N*-Methoxy-*N*,2-dimethylpentanamide

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*

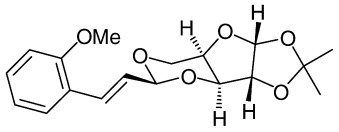


Ee = 100%
$[\alpha]_D^{25} = -12.5$ (*c* 0.6, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

$C_{17}H_{19}NO_7$
1,2-*O*-Isopropylidene-3,5-*O*-[(*S*,*E*)-3-(2-nitrophenyl)-2-propenylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



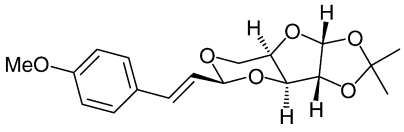
Ee = 100%
$[\alpha]_D^{25} = +5.4$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

$C_{18}H_{22}O_6$

1,2-*O*-Isopropylidene-3,5-*O*-[(*S*,*E*)-3-(2-methoxyphenyl)-2-propenylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



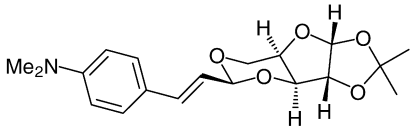
Ee = 100%
$[\alpha]_D^{25} = +13.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

$C_{18}H_{22}O_6$

1,2-*O*-Isopropylidene-3,5-*O*-[(*S*,*E*)-3-(4-methoxyphenyl)-2-propenylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



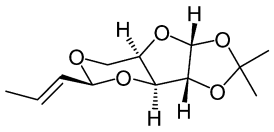
Ee = 100%
$[\alpha]_D^{25} = +19.3$ (*c* 1.0, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

$C_{19}H_{25}NO_5$

3,5-*O*-[(*S*,*E*)-3-(4-Dimethylaminophenyl)-2-propenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



Ee = 100%
$[\alpha]_D^{25} = -6.2$ (*c* 1.1, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

$C_{12}H_{18}O_5$

3,5-*O*-[(*S*,*E*)-2-Butenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

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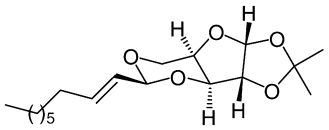
Tetrahedron: Asymmetry *20 (2009) 1065*



$C_{18}H_{30}O_5$

3,5-*O*-[(*S*,*E*)-2-Decenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

Ee = 100%
$[\alpha]_D^{25} = -3.6$ (*c* 1.3, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

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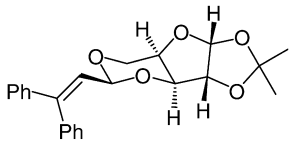
Tetrahedron: Asymmetry *20 (2009) 1065*



$C_{23}H_{24}O_5$

3,5-*O*-[(*S*)-3,3-Diphenyl-2-propenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

Ee = 100%
$[\alpha]_D^{25} = -53.7$ (*c* 1.0, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*)-, α-D-*xylofuranose*

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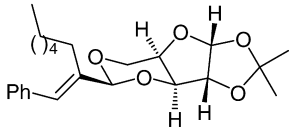
Tetrahedron: Asymmetry *20 (2009) 1065*



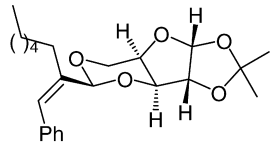
$C_{23}H_{32}O_5$

3,5-*O*-[(*S*,*E*)-2-Hexyl-3-phenyl-2-propenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

Ee = 100%
$[\alpha]_D^{25} = +15.0$ (*c* 1.0, CH2Cl2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*E*)-, α-D-*xylofuranose*

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



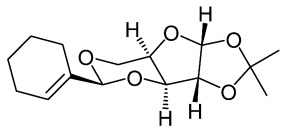
$C_{23}H_{32}O_5$

3,5-*O*-[(*S*,*Z*)-2-Hexyl-3-phenyl-2-propenylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

Ee = 100%
$[\alpha]_D^{25} = -52.9$ (*c* 1.2, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*,*Z*)-, α-D-*xylofuranose*

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



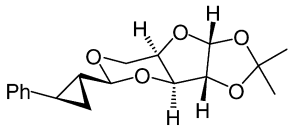
Ee = 100%
$[\alpha]_D^{25} = -2.8$ (*c* 1.0, CH_2Cl_2)
Source of chirality: chiral pool
Absolute configuration: 3,5-*O*-(*S*)-, α-D-*xylofuranose*

$C_{15}H_{22}O_5$

3,5-*O*-[(*S*)-(1-Cyclohexenyl)methylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



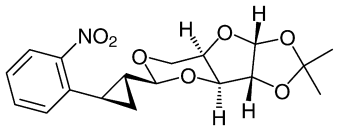
De = 82%
$[\alpha]_D^{25} = -61.7$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{18}H_{22}O_5$

1,2-*O*-Isopropylidene-3,5-*O*-[(1*S*,2*R*,3*R*)-(2-phenylcyclopropyl)methylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



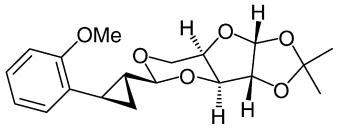
De = 78%
$[\alpha]_D^{25} = -42.8$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{18}H_{21}NO_7$

1,2-*O*-Isopropylidene-3,5-*O*-{(1*S*,2*R*,3*R*)-2-[(2-nitrophenyl)cyclopropyl]methylidene}-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



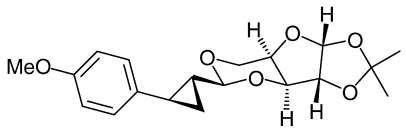
De = 77%
$[\alpha]_D^{25} = -60.6$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{19}H_{24}O_6$

1,2-*O*-Isopropylidene-3,5-*O*-{(1*S*,2*R*,3*R*)-2-[(2-methoxyphenyl)cyclopropyl]methylidene}-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



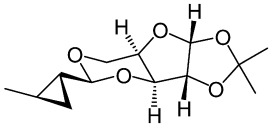
De = 46%
$[\alpha]_D^{25} = -36.9$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{19}H_{24}O_6$

1,2-*O*-Isopropylidene-3,5-*O*-{(1*S*,2*R*,3*R*)-2-[(4-methoxyphenyl)cyclopropyl]methylidene}-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



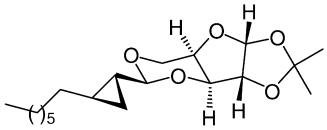
De = 65%
$[\alpha]_D^{25} = -21.2$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{13}H_{20}O_5$

1,2-*O*-Isopropylidene-3,5-*O*-[(1*S*,2*R*,3*R*)-(2-methylcyclopropyl)methylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



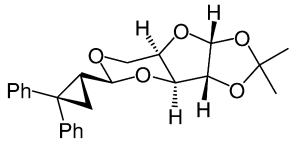
De = 100%
$[\alpha]_D^{25} = -26.7$ (*c* 1.0, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{19}H_{32}O_5$

3,5-*O*-[(1*S*,2*R*,3*R*)-(2-Heptylcyclopropyl)methylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



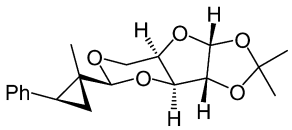
De = 100%
$[\alpha]_D^{25} = +77.0$ (*c* 1.1, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*)-, α-D-*xylofuranose*

$C_{24}H_{26}O_5$

3,5-O-[(1*S*,2*R*)-(2,2-Diphenylcyclopropyl)methylidene]-1,2-O-isopropylidene-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



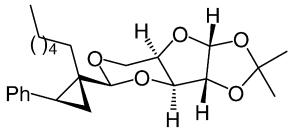
De = 76%
$[\alpha]_D^{25} = -17.8$ (*c* 0.9, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*S*)-, α-D-*xylofuranose*

$C_{19}H_{24}O_5$

1,2-*O*-Isopropylidene-3,5-*O*-[(1*S*,2*R*,3*S*)-(1-methyl-2-phenylcyclopropyl)methylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



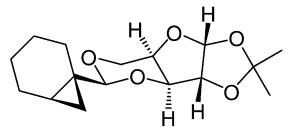
De = 66%
$[\alpha]_D^{25} = -16.9$ (*c* 0.9, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*S*)-, α-D-*xylofuranose*

$C_{24}H_{34}O_5$

3,5-*O*-[(1*S*,2*R*,3*S*)-(1-Hexyl-2-phenylcyclopropyl)methylidene]-1,2-*O*-isopropylidene-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



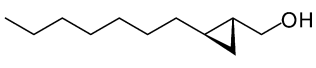
De = 67%
$[\alpha]_D^{25} = -10.0$ (*c* 1.0, CH2Cl2)
Source of chirality: asymmetric synthesis
Absolute configuration: 3,5-*O*-(1*S*,2*R*,3*R*)-, α-D-*xylofuranose*

$C_{16}H_{24}O_5$

1,2-*O*-Isopropylidene-3,5-*O*-[(1*S*,2*R*,3*R*)-(1,2-methylidenecyclohexyl)methylidene]-α-D-xylofuranose

José M. Vega-Pérez *, Ignacio Periñán, Fernando Iglesias-Guerra *

Tetrahedron: Asymmetry *20 (2009) 1065*



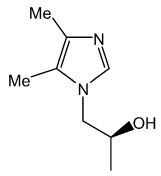
Ee = 100%
$[\alpha]_D^{25} = -17.6$ (*c* 0.5, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*R*)-*trans*-

$C_{11}H_{22}O$

(1*R*,2*R*)-*trans*-1-Heptyl-2-hydroxymethylcyclopropane

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



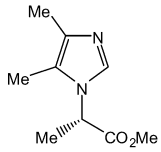
Ee = 100%
$[\alpha]_D^{20} = +69.2$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_8H_{14}N_2O$

(*S*)-1-(2-Hydroxypropyl)-4,5-dimethyl-1*H*-imidazole

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



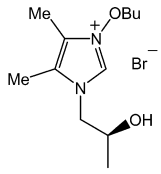
Ee = 100%
$[\alpha]_D^{20} = -9.9$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_9H_{14}N_2O_2$

Methyl (*S*)-2-(4,5-dimethyl-1*H*-imidazol-1-yl)propanoate

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



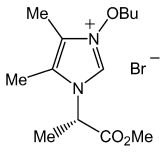
Ee = 100%
$[\alpha]_D^{20} = +13.7$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{12}H_{23}BrN_2O_2$

(*S*)-1-Butoxy-4,5-dimethyl-3-(2-hydroxypropyl)imidazolium bromide

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



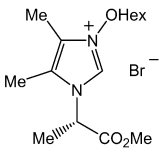
Ee = 100%
$[\alpha]_D^{20} = +14.2$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{13}H_{23}BrN_2O_3$

(*S*)-1-Butoxy-4,5-dimethyl-3-(1-[methoxycarbonyl]ethyl)imidazolium bromide

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



Ee = 100%
$[\alpha]_D^{20} = +11.1$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{15}H_{27}BrN_2O_3$

(*S*)-4,5-Dimethyl-1-hexyloxy-3-(1-[methoxycarbonyl]ethyl)imidazolium bromide

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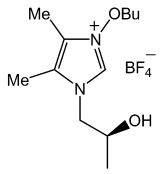
Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



Ee = 100%
$[\alpha]_D^{20} = +21.8$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{12}H_{23}BF_4N_2O_2$

(*S*)-1-Butoxy-4,5-dimethyl-3-(2-hydroxypropyl)imidazolium tetrafluoroborate

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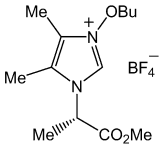
Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



Ee = 100%
$[\alpha]_D^{20} = +14.7$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{13}H_{23}BF_4N_2O_3$

(*S*)-1-Butoxy-4,5-dimethyl-3-(1-[methoxycarbonyl]ethyl)imidazolium tetrafluoroborate

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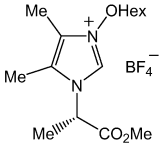
Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



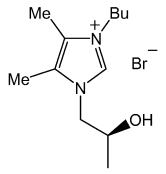
Ee = 100%
$[\alpha]_D^{20} = +9.5$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{15}H_{27}BF_4N_2O_3$

(*S*)-4,5-Dimethyl-1-hexyloxy-3-(1-[methoxycarbonyl]ethyl)imidazolium tetrafluoroborate

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



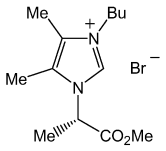
Ee = 100%
$[\alpha]_D^{20} = +13.8$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{12}H_{23}BrN_2O$

(*S*)-3-Butyl-4,5-dimethyl-1-(2-hydroxypropyl)imidazolium bromide

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



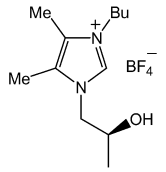
Ee = 100%
$[\alpha]_D^{20} = +11.2$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{13}H_{23}BrN_2O_2$

(*S*)-1-Butyl-3-(1-[methoxycarbonyl]ethyl)-4,5-dimethylimidazolium bromide

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



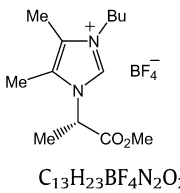
Ee = 100%
$[\alpha]_D^{20} = +21.2$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{12}H_{23}BF_4N_2O$

(*S*)-1-Butyl-4,5-dimethyl-3-(2-hydroxypropyl)imidazolium tetrafluoroborate

Grzegorz Mlostoń, Jarosław Romański, Marcin Jasiński *, Heinz Heimgartner *

Tetrahedron: Asymmetry *20 (2009) 1073*



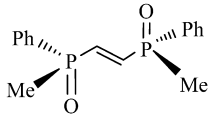
Ee = 100%
$[\alpha]_D^{20} = +10.3$ (*c* 0.2, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{13}H_{23}BF_4N_2O_2$

(*S*)-1-Butyl-4,5-dimethyl-3-(1-[methoxycarbonyl]ethyl)imidazolium tetrafluoroborate

Nikolai Vinokurov, K. Michal Pietrusiewicz, Holger Butenschön *

Tetrahedron: Asymmetry *20 (2009) 1081*



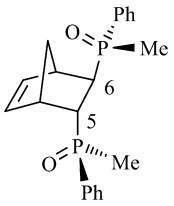
$C_{16}H_{18}P_2O_2$

(S_P,S_P)-(−)-(*E*)-1,2-Bis(methylphenylphosphinoyl)ethene

Ee 98%
$[\alpha]_D^{20} = -255.0$ (*c* 1, CH_2Cl_2)
Source of chirality: resolution of precursor
Absolute configuration: (S_P,S_P)

Nikolai Vinokurov, K. Michal Pietrusiewicz, Holger Butenschön *

Tetrahedron: Asymmetry *20 (2009) 1081*

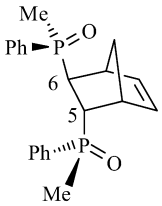


(S_P,S_P,5*R*,6*R*)-*endo*-5-*exo*-6-Di(methylphenylphosphanoyl)bicyclo[2.2.1]hept-2-ene

Ee 98%, de 96%
$[\alpha]_D^{20} = -83.5$ (*c* 0.69, $CHCl_3$)
Source of chirality: resolution of precursor, stereoselective reaction
Absolute configuration: (S_P,S_P,5*R*,6*R*)

Nikolai Vinokurov, K. Michal Pietrusiewicz, Holger Butenschön *

Tetrahedron: Asymmetry *20 (2009) 1081*

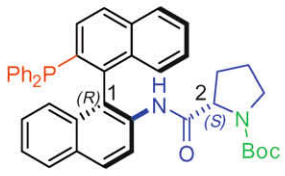


(S_P,S_P,5*S*,6*S*)-*endo*-5-*exo*-6-Di(methylphenylphosphanoyl)bicyclo[2.2.1]hept-2-ene

Ee 98%, de 90%
$[\alpha]_D^{20} = +15.4$ (*c* 0.72, $CHCl_3$)
Source of chirality: resolution of precursor, stereoselective reaction
Absolute configuration: (S_P,S_P,5*S*,6*S*)

Guang-Ning Ma, Shu-Hua Cao, Min Shi *

Tetrahedron: Asymmetry *20 (2009) 1086*



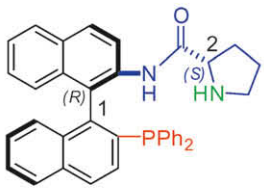
$C_{42}H_{39}N_2O_3P$

(*S*)-*tert*-Butyl-2-((*R*)-2′-(diphenylphosphino)-1,1′-binaphthyl-2-ylcarbamoyl)pyrrolidine-2-carboxylate

Ee = 100%
$[\alpha]_D^{20} = -22.4$ (*c* 0.91, $CHCl_3$)
Source of chirality: (*R*)-BINOL, L-proline
Absolute configuration: (1*R*,2*S*)

Guang-Ning Ma, Shu-Hua Cao, Min Shi *

Tetrahedron: Asymmetry *20 (2009) 1090*



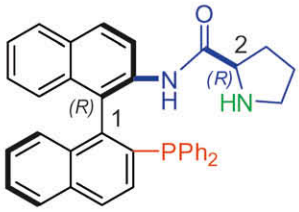
$C_{37}H_{31}N_2OP$

Ee = 100%
$[\alpha]_D^{20} = -11.4$ (*c* 2.18, $CHCl_3$)
Source of chirality: (*R*)-BINOL, L-proline
Absolute configuration: (1*R*,2*S*)

(2*S*)-*N*-((*R*)-1-(2-(Diphenylphosphino)naphthalen-1-yl)naphthalen-2-yl)pyrrolidine-2-carboxamide

Guang-Ning Ma, Shu-Hua Cao, Min Shi *

Tetrahedron: Asymmetry *20 (2009) 1086*



$C_{37}H_{31}N_2OP$

Ee = 100%
$[\alpha]_D^{20} = +20.1$ (*c* 0.53, $CHCl_3$)
Source of chirality: (*R*)-BINOL, D-proline
Absolute configuration: (1*R*,2*R*)

(2*R*)-*N*-((*R*)-1-(2-(Diphenylphosphino)naphthalen-1-yl)naphthalen-2-yl)pyrrolidine-2-carboxamide