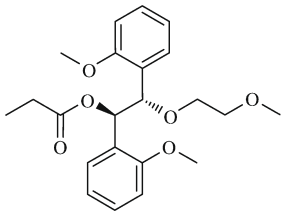
Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



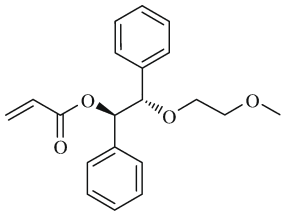
$C_{22}H_{28}O_6$

Propanoic acid (1*R*,2*S*)-1,2-bis(2-methoxyphenyl)-2-(2-methoxyethoxy)ethyl ester

Ee = >98%
$[\alpha]_D^{20} = +17.8$ (*c* 1.00, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



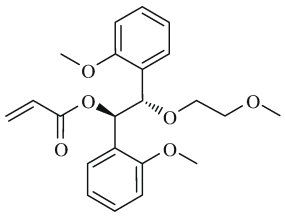
$C_{20}H_{22}O_4$

Propenoic acid (1*R*,2*S*)-2-(2-methoxyethoxy)-1,2-diphenylethyl ester

Ee = >98%
$[\alpha]_D^{20} = +27.2$ (c 1.00, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



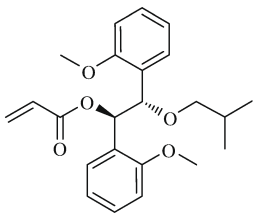
$C_{22}H_{36}O_6$

Propenoic acid (1*R*,2*S*)-2-(2-methoxyethoxy)-1,2-bis(2-methoxyphenyl)ethyl ester

Ee = >98%
$[\alpha]_D^{20} = +40.7$ (*c* 0.95, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



$C_{23}H_{28}O_5$

Propenoic acid (1*R*,2*S*)-1,2-bis(2-methoxyphenyl)-2-(2-methylpropoxy)ethyl ester

Ee = >98%
$[\alpha]_D^{20} = +58.3$ (*c* 1.17, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

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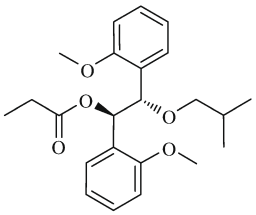
Tetrahedron: Asymmetry *20 (2009) 273*



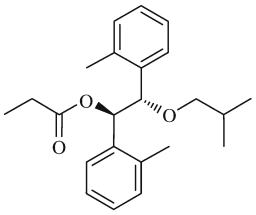
Ee = >98%
$[\alpha]_D^{20} = +38.9$ (*c* 0.70, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

$C_{23}H_{30}O_5$

Propanoic acid (1*R*,2*S*)-1,2-bis(2-methoxyphenyl)-2-(2-methylpropoxy)ethyl ester

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



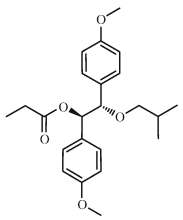
Ee = >98%
$[\alpha]_D^{20} = +53.3$ (*c* 1.07, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

$C_{23}H_{30}O_3$

Propanoic acid (1*R*,2*S*)-1,2-bis(2-methylphenyl)-2-(2-methylpropoxy)ethyl ester

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



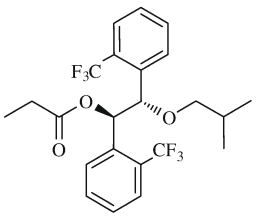
Ee = >98%
$[\alpha]_D^{20} = +14.4$ (*c* 0.65, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

$C_{23}H_{30}O_5$

Propanoic acid (1*R*,2*S*)-1,2-bis(4-methoxyphenyl)-2-(2-methylpropoxy)ethyl ester

Joachim Broeker, Max Knollmueller, Peter Gaertner *

Tetrahedron: Asymmetry *20 (2009) 273*



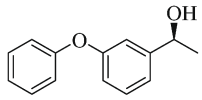
Ee = >98%
$[\alpha]_D^{20} = +13.9$ (*c* 1.10, CH_2Cl_2)
Source of chirality: [(2R)-(2*a*, 3a*a*, 4*b*, 7*b*, 7*a*)] octahydro-7,8,8-trimethyl-4,7-methanobenzafuran-2-ol
Absolute configuration: (1*R*,2*S*)

$C_{23}H_{24}F_6O_3$

Propanoic acid (1*R*,2*S*)-2-(2-methylpropoxy)-1,2-bis(2-trifluormethylphenyl)ethyl ester

Min-Can Wang *, Qing-Jian Zhang, Gao-Wei Li, Zhi-Kang Liu

Tetrahedron: Asymmetry *20 (2009) 288*



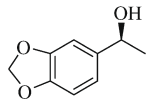
$C_{14}H_{14}O_2$

(*S*)-1-*m*-Phenoxyphenyl-1-ethanol

$[\alpha]_D^{20} = -28.0$ (*c* 0.26, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Min-Can Wang *, Qing-Jian Zhang, Gao-Wei Li, Zhi-Kang Liu

Tetrahedron: Asymmetry *20 (2009) 288*



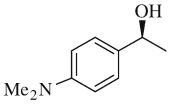
$C_9H_{10}O_3$

(*S*)-1-[3,4-(Methylenedioxy)phenyl]-1-ethanol

$[\alpha]_D^{20} = -42.0$ (*c* 0.61, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Min-Can Wang *, Qing-Jian Zhang, Gao-Wei Li, Zhi-Kang Liu

Tetrahedron: Asymmetry *20 (2009) 288*



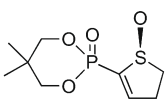
$C_{10}H_{15}NO$

(*S*)-1-*p*-Dimethylaminophenyl-1-ethanol

$[\alpha]_D^{20} = -8.9$ (*c* 0.10, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



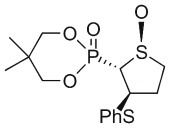
$C_9H_{15}O_4PS$

(+)-2-[2′-(5,5-Dimethyl-1,3,2-dioxaphosphorinano]-2,3-didehydrothiolane 1-oxide

Ee >90%
$[\alpha]_D$ = +77.0 (*c* 0.55, acetone)
Source of chirality: asymmetric oxidation with (+)-(2*S*, 8a*R*)-8,8-dichloro-camphorsulfonyloxaziridine
Absolute configuration: (*S*)

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



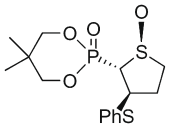
Ee = 68%
$[\alpha]_D$ = +13.2 (*c* 0.25, acetone)
Source of chirality: diastereoselective addition to a non-racemic substrate
Absolute configuration: (1S_S,2*R*,3*R*)

$C_{15}H_{21}PO_4S_2$

3-Phenylsulfanyl-2-[2′-(5,5-dimethyl-1,3,2dioxaphosphorinanyl)]thiolane 1-oxide

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



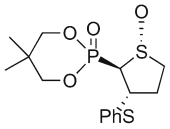
Ee >90%
$[\alpha]_D$ = +19.5 (*c* 1.0, acetone)
Source of chirality: diastereoselective addition to an enantiopure substrate
Absolute configuration: (1S_S,2*R*,3*R*)

$C_{15}H_{21}PO_4S_2$

3-Phenylsulfanyl-2-[2′-(5,5-dimethyl-1,3,2dioxaphosphorinanyl)]thiolane 1-oxide

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



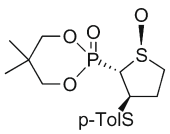
Ee >90%
$[\alpha]_D$ = −19.1 (*c* 1.1, acetone)
Source of chirality: diastereoselective addition to an enantiopure substrate
Absolute configuration: (1R_S,2*S*,3*S*)

$C_{15}H_{21}PO_4S_2$

3-Phenylsulfanyl-2-[2′-(5,5-dimethyl-1,3,2dioxaphosphorinanyl)]thiolane 1-oxide

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



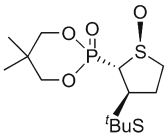
Ee = 70%
$[\alpha]_D$ = +16.5 (*c* 1.0, acetone)
Source of chirality: diastereoselective addition to a non-racemic substrate
Absolute configuration: (1S_S,2*R*,3*R*)

$C_{16}H_{24}PO_4S_2$

3-*p*-Tolylsulfanyl-2-[2′-(5,5-dimethyl-1,3,2 dioxaphosphorinanyl)]thiolane 1-oxide

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



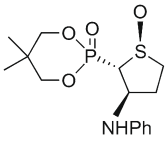
Ee = 60%
$[\alpha]_D$ = +8.5 (*c* 1.4, acetone)
Source of chirality: diastereoselective addition to a non-racemic substrate
Absolute configuration: (1S_S,2*R*,3*R*)

$C_{13}H_{26}PO_4S_2$

3-*tert*-Butylsulfanyl-2-[2′-(5,5-dimethyl-1,3,2-dioxaphosphorinanyl)]thiolane 1-oxide

Mihaela Gulea *, Małgorzata Kwiatkowska, Piotr Łyżwa, Remi Legay, Annie-Claude Gaumont, Piotr Kiełbasiński *

Tetrahedron: Asymmetry *20 (2009) 293*



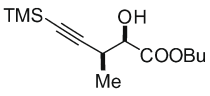
Ee = 70%
$[\alpha]_D$ = +30.0 (*c* 0.5, $CHCl_3$)
Source of chirality: diastereoselective addition to a non-racemic substrate
Absolute configuration: (1S_S,2*R*,3*R*)

$C_{15}H_{23}PO_4NS$

Phenylamino-2-[2′-(5,5-dimethyl-1,3,2-dioxaphosphorinanyl)]thiolane 1-oxide

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



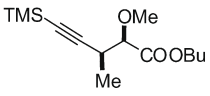
Ee = >99%
$[\alpha]_D^{24} = -7.6$ (*c* 1.09, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*R*,3*S*)

$C_{13}H_{24}O_3Si$

n-Butyl 2-hydroxy-3-methyl-5-trimethylsilyl-4-pentynoate

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



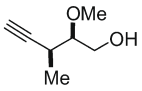
Ee = >99%
$[\alpha]_D^{24} = +0.8$ (*c* 1.54, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*R*,3*S*)

$C_{14}H_{26}O_3Si$

n-Butyl 3-methyl-2-methoxy-5-trimethylsilyl-4-pentynoate

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



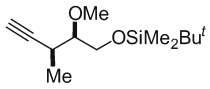
$C_7H_{12}O_2$

3-Methyl-2-methoxy-5-trimethylsilyl-4-pentyn-1-ol

Ee = >99%
$[\alpha]_D^{27} = -27.6$ (*c* 1.05, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*R*,3*S*)

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



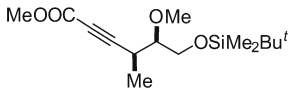
$C_{13}H_{26}O_2Si$

1-*tert*-Butyldimethylsiloxy-3-methyl-2-methoxy-4-pentyn

Ee = >99%
$[\alpha]_D^{25} = -4.7$ (*c* 1.06, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (2*R*,3*S*)

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



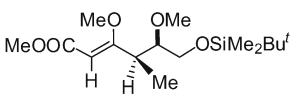
$C_{15}H_{28}O_4Si$

Methyl 6-*tert*-butyldimethylsiloxy-4-methyl-5-methoxy-2-hexynoate

Ee = >99%
$[\alpha]_D^{24} = -15.1$ (*c* 0.86, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*S*,5*R*)

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



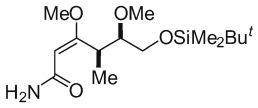
$C_{16}H_{32}O_5Si$

Methyl 6-*tert*-butyldimethylsiloxy-3,5-dimethoxy-4-methyl-2(*Z*)-hexenoate

Ee = >99%
$[\alpha]_D^{24} = -15.6$ (*c* 0.96, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



Ee = >99%
$[\alpha]_D^{27} = +35.7$ (*c* 0.84, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

$C_{15}H_{31}NO_4Si$

Methyl 6-*tert*-butyldimethylsiloxy-3,5-dimethoxy-4-methyl-2(*E*)-hexenamide

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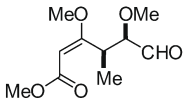
Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



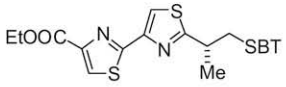
Ee = >99%
$[\alpha]_D^{23} = +104.7$ (*c* 0.55, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (4*R*,5*R*)

$C_{10}H_{16}O_5$

Methyl 3,5-dimethoxy-4-methyl-6-oxo-(2*E*)-hexenoate

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



Ee = >99%
$[\alpha]_D^{26} = -92.9$ (*c* 1.48, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (*S*)

$C_{19}H_{17}N_3O_2S_4$

4-Ethoxycarbonyl-2′-(1-benzothiazolylsulfanyl-methylethyl)-2,4′-bithiazole

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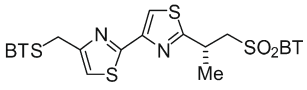
Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



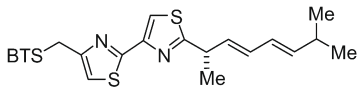
Ee = >99%
$[\alpha]_D^{26} = -74.4$ (*c* 0.77, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (*S*)

$C_{24}H_{18}N_4O_2S_6$

4-Benzothiazolylsulfanylmethyl-2′-(1-benzo-thiazolylsulfonylmethylethyl)-2,4′-bithiazole

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



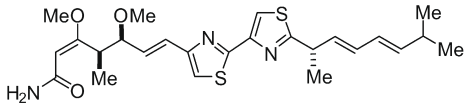
Ee = >99%
$[\alpha]_D^{27} = +7.8$ (*c* 0.525, $CHCl_3$)
Source of chirality: lipase
Absolute configuration: (*S*)

$C_{23}H_{23}N_3S_4$

4-(2″-Benzothiazolyl)sulfanylmethyl-2′-[1‴,6‴-dimethylhepta-(2‴*E*),(4‴*E*)-dienyl]-2,4′-bithiazole

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



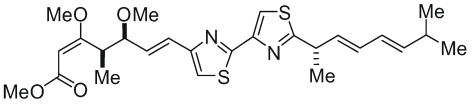
Ee = >99%
$[\alpha]_D^{26} = +33.5$ (*c* 0.70, MeOH)
Source of chirality: lipase
Absolute configuration: (4*R*,5*S*,1*S*)

$C_{25}H_{33}N_3O_3S_2$

Myxothiazol A

Yuki Iwaki, Masahiro Kaneko, Hiroyuki Akita *

Tetrahedron: Asymmetry *20 (2009) 298*



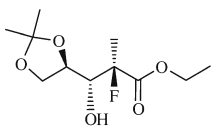
Ee = >99%
$[\alpha]_D^{27} = +85.7$ (*c* 1.66, MeOH)
Source of chirality: lipase
Absolute configuration: (4*R*,5*S*,1*S*)

$C_{26}H_{34}N_2O_4S_2$

Myxothiazol Z

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



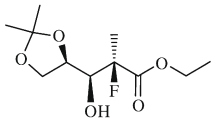
Ee = >99%
$[\alpha]_D^{25} = +16.8$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glycerade-hyde, asymmetric induction
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{11}H_{19}FO_5$

Ethyl (2*R*,3*R*,4*R*)-4,5-*O*-isopropylidene-2-fluoro-3-hydroxy-2-methylvalerate

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



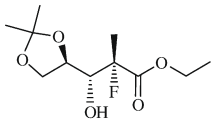
$C_{11}H_{19}FO_5$

Ethyl (2*S*,3*R*,4*R*)-4,5-*O*-isopropylidene-2-fluoro-3-hydroxy-2-methylvalerate

Ee = >99%
$[\alpha]_D^{25} = +11.0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glyceraldehyde, asymmetric induction
Absolute configuration: (2*S*,3*R*,4*R*)

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



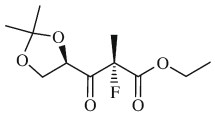
$C_{11}H_{19}FO_5$

Ethyl (2*R*,3*S*,4*R*)-4,5-*O*-isopropylidene-2-fluoro-3-hydroxy-2-methylvalerate

Ee = >99%
$[\alpha]_D^{25} = -5.7$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glyceraldehyde, asymmetric induction
Absolute configuration: (2*R*,3*S*,4*R*)

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



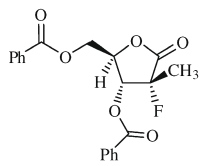
$C_{11}H_{17}FO_5$

Ethyl (2*R*,4*R*)-4,5-isopropylidene-2-fluoro-3-keto-2-methylvalerate

Ee = >99%
$[\alpha]_D^{25} = +13.4$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glyceraldehyde, asymmetric induction
Absolute configuration: (2*R*,4*R*)

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



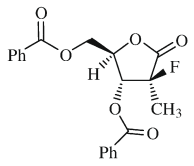
$C_{20}H_{17}FO_6$

(2*R*)-3,5-Di-*O*-benzoyl-2-fluoro-2-C-methyl-D-ribono-γ-lactone

Ee = >99%
$[\alpha]_D^{25} = +124.6$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glyceraldehyde, asymmetric induction
Absolute configuration: (2*R*,3*R*,4*R*)

Pingsheng Zhang *, Hans Iding, Miall Cedilote, Stephan Brunner, Thomas Williamson, Thomas P. Cleary

Tetrahedron: Asymmetry *20 (2009) 305*



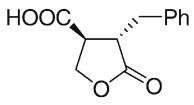
$C_{20}H_{17}FO_6$

(2*S*)-3,5-Di-*O*-benzoyl-2-fluoro-2-C-methyl-D-ribono-γ-lactone

Ee = >99%
$[\alpha]_D^{25} = +23.6$ (*c* 1.0, CH_2Cl_2)
Source of chirality: 2,3-*O*-isopropylidene-D-glycerade-hyde, asymmetric induction
Absolute configuration: (2*S*,3*R*,4*R*)

Federico Berti, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Ennio Valentin *, Ennio Zangrando

Tetrahedron: Asymmetry *20 (2009) 313*



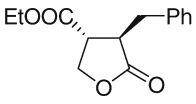
$C_{12}H_{12}O_4$

trans-(−)-(3*S*,4*S*)-4-Benzyl-5-oxo-3-tetrahydrofurancarboxylic acid

Ee = 92% (by chiral HRGC)
$[\alpha]_D^{25} = -29.2$ (*c* 0.24, MeOH)
$\Delta\varepsilon_{221} = +0.8$, $\Delta\varepsilon_{263} = +0.03$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (3*S*,4*S*)

Federico Berti, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Ennio Valentin *, Ennio Zangrando

Tetrahedron: Asymmetry *20 (2009) 313*



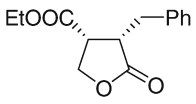
$C_{14}H_{16}O_4$

Ethyl *trans*-(+)-(3*R*,4*R*)-4-benzyl-5-oxo-3-tetrahydrofurancarboxylate

Ee = 96% (by chiral HRGC)
$[\alpha]_D^{25} = +34.6$ (*c* 0.24, MeOH)
$\Delta\varepsilon_{221} = -2.6$, $\Delta\varepsilon_{263} = -0.1$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (3*R*,4*R*)

Federico Berti, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Ennio Valentin *, Ennio Zangrando

Tetrahedron: Asymmetry *20 (2009) 313*



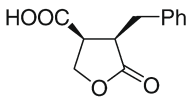
$C_{14}H_{16}O_4$

Ethyl *cis*-(+)-(3*R*,4*S*)-4-benzyl-5-oxo-3-tetrahydrofurancarboxylate

Ee = 94% (by chiral HRGC)
$[\alpha]_D^{25} = +124.8$ (*c* 1.4, MeOH)
$\Delta\varepsilon_{217} = +5.0$, $\Delta\varepsilon_{262} = +0.1$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (3*R*,4*S*)

Federico Berti, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Ennio Valentin *, Ennio Zangrando

Tetrahedron: Asymmetry *20 (2009) 313*



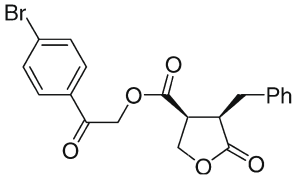
$C_{12}H_{12}O_4$

cis-(−)-(3*S*,4*R*)-4-Benzyl-5-oxo-3-tetrahydrofurancarboxylic acid

Ee = 99% (by chiral HRGC)
$[\alpha]_D^{25} = -103.0$ (*c* 0.93, MeOH)
$\Delta\varepsilon_{217} = -3.7$, $\Delta\varepsilon_{263} = -0.1$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (3*S*,4*R*)

Federico Berti, Cristina Forzato *, Giada Furlan, Patrizia Nitti, Giuliana Pitacco, Ennio Valentin *, Ennio Zangrando

Tetrahedron: Asymmetry *20 (2009) 313*



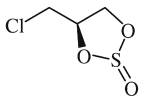
$C_{20}H_{17}O_5Br$

4-Bromophenacyl *cis*-(−)-(3*S*,4*R*)-4-benzyl-5-oxo-3-tetrahydrofurancarboxylate

Ee = 99%
$[\alpha]_D^{25} = -176.8$ (*c* 0.5, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: (3*S*,4*R*)

Katarzyna Kulig *, Agnieszka Boba, Anna Bielejewska, Magdalena Gorska, Barbara Malawska

Tetrahedron: Asymmetry *20 (2009) 322*



$C_3H_5O_3SCl$

(*R*)-4-Chloromethyl-[1,3,2]dioxathiolane-2-oxide

$[\alpha]_D^{20} = -44.65$ (*c* 1, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*R*)

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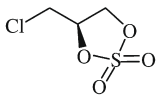
Tetrahedron: Asymmetry *20 (2009) 322*



$C_3H_5O_4SCl$

(*R*)-4-Chloromethyl-[1,3,2]dioxathiolane 2,2-dioxide

$[\alpha]_D^{20} = +4.2$ (*c* 1, CH_2Cl_2)
Source of chirality: chiral substrate
Absolute configuration: (*R*)

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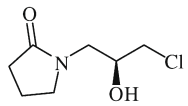
Tetrahedron: Asymmetry *20 (2009) 322*



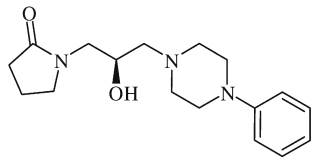
$[\alpha]_D^{20} = +30.9$ (*c* 1, MeOH)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_7H_{12}O_2NCl$

(*S*)-1-(3-Chloro-2-hydroxy-propyl)-pyrrolidin-2-one

Katarzyna Kulig *, Agnieszka Boba, Anna Bielejewska, Magdalena Gorska, Barbara Malawska

Tetrahedron: Asymmetry *20 (2009) 322*



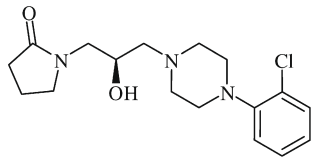
$[\alpha]_D^{20} = +10.3$ (*c* 1, EtOH)
Source of chirality: chiral substrate
Absolute configuration: (*R*)

$C_{17}H_{25}N_3O_2$

(*R*)-1-[2-Hydroxy-3-(4-phenyl-piperazin-1-yl)-propyl]-pyrrolidin-2-one

Katarzyna Kulig *, Agnieszka Boba, Anna Bielejewska, Magdalena Gorska, Barbara Malawska

Tetrahedron: Asymmetry *20 (2009) 322*



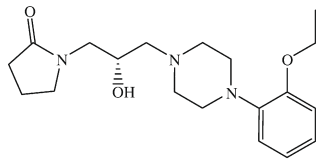
$[\alpha]_D^{20} = +19.9$ (*c* 1, EtOH)
Source of chirality: chiral substrate
Absolute configuration: (*R*)

$C_{17}H_{24}N_3O_2Cl$

(*R*)-1-[2-Hydroxy-3-[4-(2-chlorophenyl)piperazin-1-yl]-propyl]-pyrrolidin-2-one

Katarzyna Kulig *, Agnieszka Boba, Anna Bielejewska, Magdalena Gorska, Barbara Malawska

Tetrahedron: Asymmetry *20 (2009) 322*



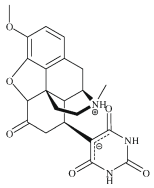
$[\alpha]_D^{20} = -18.4$ (*c* 1, EtOH)
Source of chirality: chiral substrate
Absolute configuration: (*S*)

$C_{19}H_{29}N_3O_3$

(*S*)-1-[2-Hydroxy-3-[4-(2-ethoxyphenyl)piperazin-1-yl]-propyl]-pyrrolidin-2-one

Tonko Kolev*, Rumjana Bakalska, Rüediger W. Seidel, Heike Mayer-Figge, Iris M. Oppel, Michael Spiteller, William S. Sheldrick, Bojidarka B. Koleva

Tetrahedron: Asymmetry *20 (2009) 327*



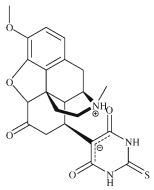
Ee = 88%
$[\alpha]_D^{20} = -94.5$ (*c* 0.25, C_2H_5OH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{22}H_{23}N_3O_6$

5-[10-Methoxy-4-methyl-14-oxo-12-oxa-4-azapentacyclo [9.6.1.0^{1,13}0^{5,17}0^{7,18}]octadeca-7(18),8,10-trien-16-yl] hexahydro-2,4,6-pyrimidine-trione

Tonko Kolev*, Rumjana Bakalska, Rüediger W. Seidel, Heike Mayer-Figge, Iris M. Oppel, Michael Spiteller, William S. Sheldrick, Bojidarka B. Koleva

Tetrahedron: Asymmetry *20 (2009) 327*



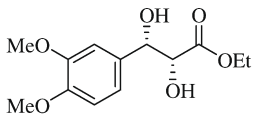
Ee = 81%
$[\alpha]_D^{20} = -92.3$ (*c* 0.25, C_2H_5OH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*)

$C_{22}H_{23}N_3O_5S$

5-[10-Methoxy-4-methyl-14-oxo-12-oxa-4-azapentacyclo [9.6.1.0^{1,13}0^{5,17}0^{7,18}]octadeca-7(18),8,10-trien-16-yl] hexahydro-2,4,6-thiopyrimidine-trione

Arun R. Jagdale, R. Santhosh Reddy, Arumugam Sudalai *

Tetrahedron: Asymmetry *20 (2009) 335*



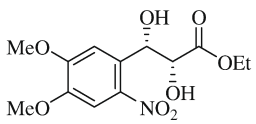
$[\alpha]_D^{25} = +3.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (2*R*,3*S*)

$C_{13}H_{18}O_6$

(2*R*,3*S*)-Ethyl 2,3-dihydroxy-3-(3,4-dimethoxyphenyl)propanoate

Arun R. Jagdale, R. Santhosh Reddy, Arumugam Sudalai *

Tetrahedron: Asymmetry *20 (2009) 335*



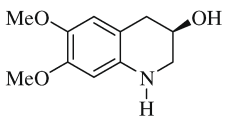
$[\alpha]_D^{25} = +105.2$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (2*R*,3*S*)

$C_{13}H_{17}NO_8$

(2*R*,3*S*)-Ethyl 2,3-dihydroxy-3-(4,5-dimethoxy-2-nitrophenyl)propanoate

Arun R. Jagdale, R. Santhosh Reddy, Arumugam Sudalai *

Tetrahedron: Asymmetry *20 (2009) 335*



$C_9H_{11}NO$

(*R*)-1,2,3,4-Tetrahydro-6,7-methoxyxyquinolin-3-ol

$[\alpha]_D^{25} = +11.2$ (*c* 1, $CHCl_3$)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (3*R*)

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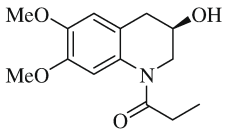
Tetrahedron: Asymmetry *20 (2009) 335*



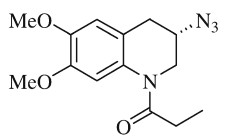
$C_{14}H_{19}NO_4$

1-[(*R*)-3,4-Dihydro-3-hydroxy-6,7-dimethoxyquinolin-1(2*H*)-yl]propan-1-one

Ee 95% determined by chiral HPLC
$[\alpha]_D^{25} = +8.7$ (*c* 1.15, $CHCl_3$)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (3*R*)

Arun R. Jagdale, R. Santhosh Reddy, Arumugam Sudalai *

Tetrahedron: Asymmetry *20 (2009) 335*



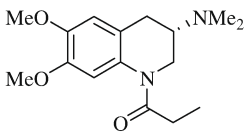
$C_{14}H_{18}N_4O_3$

1-[(*R*)-3-Azido-3,4-dihydro-6,7-dimethoxyquinolin-1(2*H*)-yl]propan-1-one

$[\alpha]_D^{25} = +38.2$ (*c* 2, $CHCl_3$)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (3*S*)

Arun R. Jagdale, R. Santhosh Reddy, Arumugam Sudalai *

Tetrahedron: Asymmetry *20 (2009) 335*



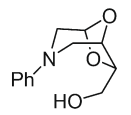
$C_{16}H_{24}N_2O_3$

1-[(*S*)-3-(Dimethylamino)-3,4-dihydro-6,7-dimethoxy-quinolin-1(2*H*)-yl]propan-1-one

$[\alpha]_D^{25} = -3.2$ (*c* 1, EtOH)
Source of chirality: asymmetric dihydroxylation
Absolute configuration: (3*S*)

Dina Scarpi *, Ernesto G. Occhiato, Antonio Guarna

Tetrahedron: Asymmetry *20 (2009) 340*



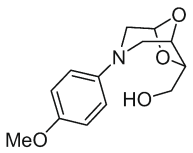
$C_{12}H_{15}NO_3$

(1*S*,5*R*,7*R*)-(3-Phenyl-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

Ee > 97%
$[\alpha]_D^{26} = -33.1$ (*c* 0.82, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

Dina Scarpi *, Ernesto G. Occhiato, Antonio Guarna

Tetrahedron: Asymmetry *20 (2009) 340*



$C_{13}H_{17}NO_4$

(1*S*,5*S*,7*R*)-(3-(4-Methoxyphenyl)-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

Ee > 97%
$[\alpha]_D^{24} = -41.8$ (*c* 0.58, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

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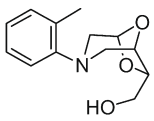
Tetrahedron: Asymmetry *20 (2009) 340*



$C_{13}H_{17}NO_3$

(1*S*,5*R*,7*R*)-(3-*o*-Tolyl-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

Ee > 97%
$[\alpha]_D^{26} = -90.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

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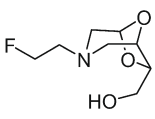
Tetrahedron: Asymmetry *20 (2009) 340*



$C_8H_{14}FNO_3$

(1*S*,5*R*,7*R*)-(3-(2-Fluoroethyl)-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

Ee > 97%
$[\alpha]_D^{26} = -73.8$ (*c* 0.48, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

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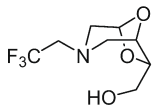
Tetrahedron: Asymmetry *20 (2009) 340*



Ee > 97%
$[\alpha]_D^{24} = -67.8$ (*c* 0.12, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

$C_8H_{12}F_3NO_3$

(1*S*,5*R*,7*R*)-(3-(2,2,2-Trifluoroethyl)-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

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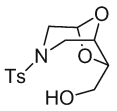
Tetrahedron: Asymmetry *20 (2009) 340*



Ee > 97%
$[\alpha]_D^{26} = -7.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

$C_{13}H_{17}NO_5S$

(1*S*,5*R*,7*R*)-(3-(Toluene-4-sulfonyl)-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

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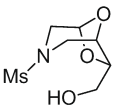
Tetrahedron: Asymmetry *20 (2009) 340*



Ee > 97%
$[\alpha]_D^{26} = -40.4$ (*c* 0.70, CH_3OH)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

$C_7H_{13}NO_5S$

(1*S*,5*R*,7*R*)-(3-Methanesulfonyl-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

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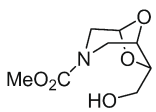
Tetrahedron: Asymmetry *20 (2009) 340*



Ee > 97%
$[\alpha]_D^{26} = -44.2$ (*c* 0.51, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

$C_8H_{13}NO_5$

(1*S*,5*R*,7*R*)-7-Hydroxymethyl-6,8-dioxa-3-azabicyclo[3.2.1]octane-3-carboxylic acid methyl ester

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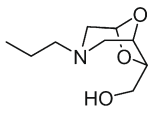
Tetrahedron: Asymmetry *20 (2009) 340*



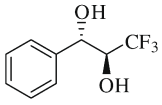
$C_9H_{17}NO_3$

(1*S*,5*R*,7*R*)-(3-Propyl-6,8-dioxa-3-azabicyclo[3.2.1]oct-7-yl)methanol

Ee > 97%
$[\alpha]_D^{24} = -68.5$ (*c* 0.20, $CHCl_3$)
Source of chirality: (−)-2,3-*O*-isopropylidene-D-erythronolactone
Absolute configuration: (1*S*,5*S*,7*R*)

Carlo F. Morelli *, Paola Cairoli, Tiziana Marigolo, Giovanna Speranza, Paolo Manitto

Tetrahedron: Asymmetry *20 (2009) 351*



$C_9H_9F_3O_2$

(1*S*,2*S*)-3,3,3-Trifluoro-1-phenylpropane-1,2-diol

Ee > 99%
$[\alpha]_D = +14.0$ (*c* 1.06, MeOH)
Source of chirality: chiral starting material
Absolute configuration: (1*S*,2*S*)

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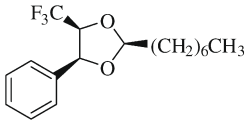
Tetrahedron: Asymmetry *20 (2009) 351*



$C_{17}H_{23}F_3O_2$

(2*S*,4*S*,5*S*)-2-Heptyl-4-phenyl-5-(trifluoromethyl)-1,3-dioxolane

De > 99%
$[\alpha]_D = +101.0$ (*c* 1.09, EtOH)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,4*S*,5*S*)

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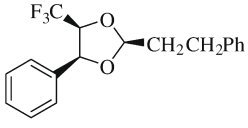
Tetrahedron: Asymmetry *20 (2009) 351*



$C_{18}H_{17}F_3O_2$

(2*S*,4*S*,5*S*)-2-Phenethyl-4-phenyl-5-(trifluoromethyl)-1,3-dioxolane

De > 99%
$[\alpha]_D = +120.7$ (*c* 0.93, EtOH)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,4*S*,5*S*)

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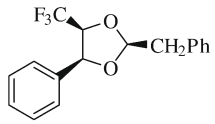
Tetrahedron: Asymmetry *20 (2009) 351*

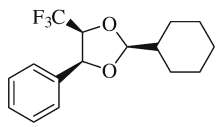


De > 99%
$[\alpha]_D = +121.3$ (*c* 0.95, EtOH)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,4*S*,5*S*)

$C_{17}H_{15}F_3O_2$
(2*S*,4*S*,5*S*)-2-Benzyl-4-phenyl-5-(trifluoromethyl)-1,3-dioxolane

Carlo F. Morelli *, Paola Cairoli, Tiziana Marigolo, Giovanna Speranza, Paolo Manitto

Tetrahedron: Asymmetry *20 (2009) 351*

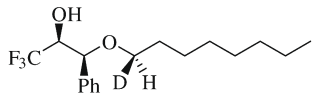


De > 99%
$[\alpha]_D = +72.8$ (*c* 0.99, EtOH)
Source of chirality: chiral starting material
Absolute configuration: (2*S*,4*S*,5*S*)

$C_{16}H_{19}F_3O_2$
(2*S*,4*S*,5*S*)-2-Cyclohexyl-4-phenyl-5-(trifluoromethyl)-1,3-dioxolane

Carlo F. Morelli *, Paola Cairoli, Tiziana Marigolo, Giovanna Speranza, Paolo Manitto

Tetrahedron: Asymmetry *20 (2009) 351*



$[\alpha]_D = +17.5$ (*c* 1.10, MeOH)
Diastereomeric ratio at deuterated carbon = 95:5
Source of chirality at deuterated carbon: asymmetric induction
Absolute configuration at deuterated carbon: (*R*)

$C_{17}H_{24}DF_3O_2$
(2*S*,3*S*)-1,1,1-Trifluoro-3-((*R*)-[α-^{2}H]octyloxy)-3-phenylpropan-2-ol

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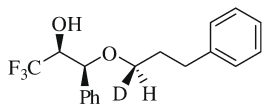
Tetrahedron: Asymmetry *20 (2009) 351*

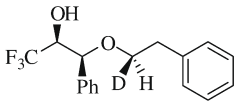


$[\alpha]_D = +43.1$ (*c* 0.73, MeOH)
Diastereomeric ratio at deuterated carbon = 94:6
Source of chirality at deuterated carbon: asymmetric induction
Absolute configuration at deuterated carbon: (*R*)

$C_{18}H_{18}DF_3O_2$
(2*S*,3*S*)-1,1,1-Trifluoro-3-phenyl-3-((*R*)-[α-^{2}H]3-phenylpropyloxy)propan-2-ol

Carlo F. Morelli *, Paola Cairoli, Tiziana Marigolo, Giovanna Speranza, Paolo Manitto

Tetrahedron: Asymmetry *20 (2009) 351*



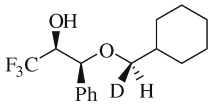
$[\alpha]_D = +55.6$ (c 0.62, MeOH)
Diastereomeric ratio at deuterated carbon = 92:8
Source of chirality at deuterated carbon: asymmetric induction
Absolute configuration at deuterated carbon: (*R*)

$C_{17}H_{16}DF_3O_2$

(2*S*,3*S*)-1,1,1-Trifluoro-3-((*R*)-[α-^{2}H]phenethoxy)-3-phenylpropan-2-ol

Carlo F. Morelli *, Paola Cairoli, Tiziana Marigolo, Giovanna Speranza, Paolo Manitto

Tetrahedron: Asymmetry *20 (2009) 351*



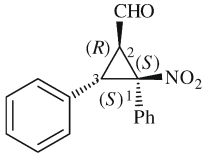
$[\alpha]_D = +37.2$ (c 0.88, MeOH)
Diastereomeric ratio at deuterated carbon = 96:4
Source of chirality at deuterated carbon: asymmetric induction
Absolute configuration at deuterated carbon: (*R*)

$C_{16}H_{20}DF_3O_2$

(2*S*,3*S*)-3-((*R*)-[α-^{2}H]Cyclohexylmethoxy)-1,1,1-trifluoro-3-phenylpropan-2-ol

Jun-min Zhang, Zhi-peng Hu, Li-ting Dong, Yi-ning Xuan, Chun-Liang Lou, Ming Yan *

Tetrahedron: Asymmetry *20 (2009) 355*



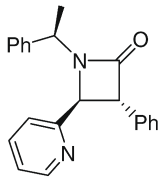
$[\alpha]_D^{20} = +17.0$ (c 1.0, $CHCl_3$)
Absolute configuration (1*S*,2*S*,3*S*)

(1*S*,2*R*,3*S*)-1-Nitro-1,3-diphenyl-2-formylcyclopropane

$C_{16}H_{13}NO_3$

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



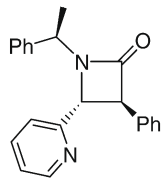
Ee = 100%
$[\alpha]_D^{30.6} = -99.25$ (c 0.008, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{22}H_{20}N_2O$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)-3-Phenyl-1-(1-phenylethyl)-4-pyridin-2-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



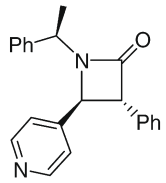
Ee = 100%
$[\alpha]_D^{31.4} = +113.9$ (*c* 0.015, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{22}H_{20}N_2O$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)-3-Phenyl-1-(1-phenylethyl)-4-pyridin-2-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



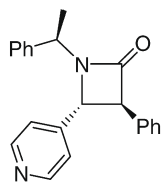
Ee = 100%
$[\alpha]_D^{28.2} = -93.3$ (*c* 0.01, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{22}H_{20}N_2O$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)-3-Phenyl-1-(1-phenylethyl)-4-pyridin-4-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



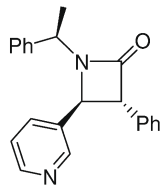
Ee = 100%
$[\alpha]_D^{29.4} = +103.3$ (*c* 0.012, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{22}H_{20}N_2O$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)-3-Phenyl-1-(1-phenylethyl)-4-pyridin-4-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



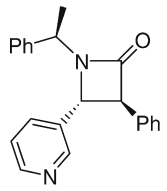
Ee = 100%
$[\alpha]_D^{27.2} = -79.9$ (*c* 0.012, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{22}H_{20}N_2O$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)-3-Phenyl-1-(1-phenylethyl)-4-pyridin-3-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



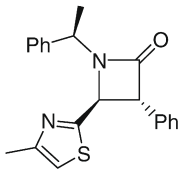
Ee = 100%
$[\alpha]_D^{28.2} = +51.5$ (*c* 0.010, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{22}H_{20}N_2O$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)- 3-Phenyl-1-(1-phenylethyl)-4-pyridin-3-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



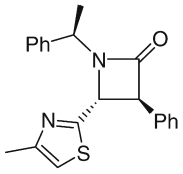
Ee = 100%
$[\alpha]_D^{23.0} = -88.1$ (*c* 0.010, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{21}H_{20}N_2OS$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)-4-(4-Methylthiazol-2-yl)-3-phenyl-1-(1-phenylethyl)azetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



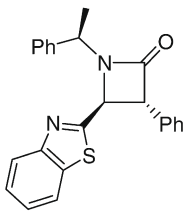
Ee = 100%
$[\alpha]_D^{23.0} = +100.6$ (*c* 0.012, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{21}H_{20}N_2OS$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)-4-(4-Methylthiazol-2-yl)-3-phenyl-1-(1-phenylethyl)azetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



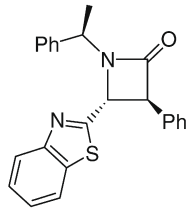
Ee = 100%
$[\alpha]_D^{28.0} = -72.5$ (*c* 0.015, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{24}H_{20}N_2OS$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)-4-Benzothiazol-2-yl-3-phenyl-1-(1-phenylethyl)azetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



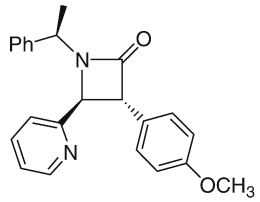
Ee = 100%
$[\alpha]_D^{31.0} = +86.1$ (*c* 0.013, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{24}H_{20}N_2OS$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)-4-Benzothiazol-2-yl-3-phenyl-1-(1-phenylethyl)azetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



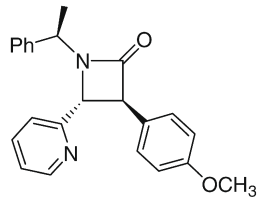
Ee = 100%
$[\alpha]_D^{24.9} = -205.0$ (*c* 0.012, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*R*,4*S*,1′*R*)

$C_{23}H_{22}N_2O_2$

(−)-(3*R*,4*S*,1′*R*)-(*trans*)- 3-(4-Methoxyphenyl)-1-(1-phenylethyl)-4-pyridin-2-ylazetidin-2-one

Luigino Troisi *, Emanuela Pindinelli, Valentina Strusi, Piera Trinchera

Tetrahedron: Asymmetry *20 (2009) 368*



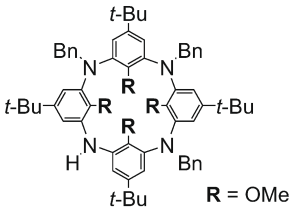
Ee = 100%
$[\alpha]_D^{25.7} = +110.0$ (*c* 0.012, $CHCl_3$)
Source of chirality: asymmetric induction
Absolute configuration: (3*S*,4*R*,1′*R*)

$C_{23}H_{22}N_2O_2$

(+)-(3*S*,4*R*,1′*R*)-(*trans*)- 3-(4-Methoxyphenyl)-1-(1-phenylethyl)-4-pyridin-2-ylazetidin-2-one

Koichi Ishibashi, Hirohito Tsue *, Hiroki Takahashi, Rui Tamura

Tetrahedron: Asymmetry *20 (2009) 375*



$[\alpha]_D^{27} = -122.5$ (*c* 0.1, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: undetermined

$C_{65}H_{78}N_4O_4$

2,8,14-Tribenzyl-5,11,17,23-tetra-*tert*-butyl-25,26,27,28-tetramethoxy-2,8,14,20-tetraazacalix[4]arene