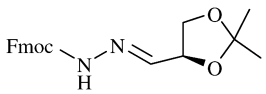
Mathieu Laurencin, Olivier Tasseau, Michèle Baudy-Floc'h *

Tetrahedron: Asymmetry *20 (2009) 1103*



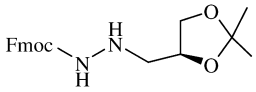
$C_{21}H_{22}N_2O_4$

(4*R*)-2,2-Dimethyl-1,3-dioxolane, 7-fluorenyl methyl oxycarbonyl 4-hydrazone

Ee = 99%
$[\alpha]_D^{20} = +12.4$ (*c* 0.005, EtOH)
Source of chirality: (*R*)-2,3-*O*-isopropylidene-D-glyceraldehyde
Absolute configuration: (4*R*)

Mathieu Laurencin, Olivier Tasseau, Michèle Baudy-Floc'h *

Tetrahedron: Asymmetry *20 (2009) 1103*



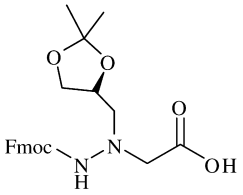
$C_{21}H_{24}N_2O_4$

(4*R*)-2,2-Dimethyl-1,3-dioxolane, 7-fluorenyl methyl oxycarbonyl 4-hydrazine

Ee = 99%
$[\alpha]_D^{20} = +4.6$ (*c* 0.005, EtOH)
Source of chirality: (*R*)-2,3-*O*-isopropylidene-D-glyceraldehyde
Absolute configuration: (4*R*)

Mathieu Laurencin, Olivier Tasseau, Michèle Baudy-Floc'h *

Tetrahedron: Asymmetry *20 (2009) 1103*



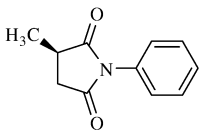
$C_{23}H_{25}N_2O_6$

Fmoc-aza-β^3-Gly ((4*R*)-2,2-dimethyl-1,3-dioxolane)-OH or Fmoc-aza-β^3-Hyht

Ee = 99%
$[\alpha]_D^{20} = +5.8$ (*c* 0.005, EtOH)
Source of chirality: (*R*)-2,3-*O*-isopropylidene-D-glyceraldehyde
Absolute configuration: (4*R*)

Maximiliano A. Sortino, Valdir Cechinel Filho, Susana A. Zacchino *

Tetrahedron: Asymmetry *20 (2009) 1106*



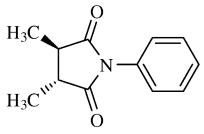
$C_{11}H_{11}NO_2$

(+)-(*R*)-*N*-Phenyl-2-methylsuccinimide

Ee > 99%
$[\alpha]_D 25 = +5.1$ (*c* 0.91, $CHCl_3$)
Source of chirality: asymmetric reduction with *Aspergillus niger* ATCC 9029, *Aspergillus flavus* ATCC 9170, *Aspergillus fumigatus* ATCC 26934
Absolute configuration: (*R*)

Maximiliano A. Sortino, Valdir Cechinel Filho, Susana A. Zacchino *

Tetrahedron: Asymmetry *20 (2009) 1106*



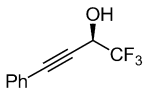
$C_{12}H_{13}NO_2$

(+)-(2*R*,3*R*)-*N*-Phenyl-2,3-dimethylsuccinimide

Ee > 99%
$[\alpha]_D^{25} = +39.35$ (*c* 0.36, $CHCl_3$)
Source of chirality: asymmetric reduction with *Aspergillus niger* ATCC 9029, *Aspergillus flavus* ATCC 9170 *Aspergillus fumigatus* ATCC 26934 *Fusarium graminearum* CEREMIC 170-02 *Penicillium* sp CEREMIC 129-09
Absolute configuration: (2*R*,3*R*)

Sung-Jin Ko, Jung Yun Lim, Nan Young Jeon, Keehoon Won, Deok-Chan Ha, Bum Tae Kim, Hyuk Lee *

Tetrahedron: Asymmetry *20 (2009) 1109*



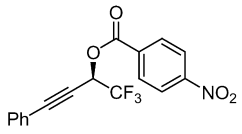
$C_{10}H_7F_3O$

(*R*)-1,1,1,-Trifluoro-4-phenylbut-3-yn-ol

$[\alpha]_D^{25} = -6.8$ (*c* 0.02, CH_3OH)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

Sung-Jin Ko, Jung Yun Lim, Nan Young Jeon, Keehoon Won, Deok-Chan Ha, Bum Tae Kim, Hyuk Lee *

Tetrahedron: Asymmetry *20 (2009) 1109*



$C_{17}H_{10}F_3NO_4$

(*R*)-1,1,1-Trifluoro-4-phenylbut-3-yn-2-yl 4-nitrobenzoate

$[\alpha]_D^{25} = +45.9$ (*c* 0.01, CH_3OH)
Source of chirality: enzymatic resolution
Absolute configuration: (*R*)

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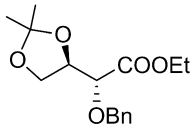
Tetrahedron: Asymmetry *20 (2009) 1115*



$C_{16}H_{22}O_5$

(*R*)-Ethyl 2-(benzyloxy)-2-((*R*)-2,2-dimethyl-1,3-dioxalan-4-yl)acetate

$[\alpha]_D^{20} = +26.5$ (*c* 2.0, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*R*)

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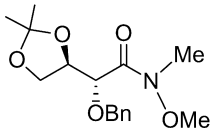
Tetrahedron: Asymmetry *20 (2009) 1115*



$[\alpha]_D^{20} = +14.7$ (*c* 1.8, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*R*)

$C_{16}H_{23}O_5$

(*R*)-2-(Benzyloxy)-2-((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)-*N*-methoxy-*N*-methylacetamide

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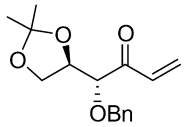
Tetrahedron: Asymmetry *20 (2009) 1115*



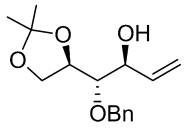
$[\alpha]_D^{20} = +22.1$ (*c* 1.2, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (4*R*,5*R*)

$C_{16}H_{20}O_4$

(*R*)-1-(Benzyloxy)-1-((*R*)-2,2-dimethyl-1,3-dioxalan-4-yl)but-3-en-2-one

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



$[\alpha]_D^{20} = +6.9$ (*c* 1.3, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (3*S*,4*S*,5*R*)

$C_{16}H_{22}O_4$

(1*S*,2*S*)-1-(Benzyloxy)-1-((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)but-3-en-2-ol

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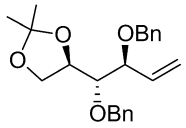
Tetrahedron: Asymmetry *20 (2009) 1115*



$[\alpha]_D^{20} = +31.8$ (*c* 2.7, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (3*S*,4*S*,5*R*)

$C_{23}H_{28}O_4$

(*R*)-4-((1*S*,2*S*)-1,2-Bis(benzyloxy)but-3-enyl)-2,2-dimethyl-1,3-dioxolane

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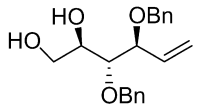
Tetrahedron: Asymmetry *20 (2009) 1115*



$C_{20}H_{24}O_4$

(2*R*,3*S*,4*S*)-3,4-Bis(benzyloxy)hex-5-ene-1,2-diol

$[\alpha]_D^{20} = +47.8$ (*c* 0.7, $CHCl_3$)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*R*,4*S*)

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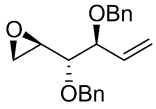
Tetrahedron: Asymmetry *20 (2009) 1115*



$C_{20}H_{22}O_3$

(*R*)-2-((1*S*,2*S*)-1,2-Bis(benzyloxy)but-3-enyl)oxirane

$[\alpha]_D^{20} = +26.2$ (*c* 2.6, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*R*,4*S*)

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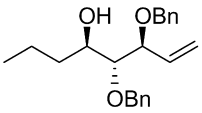
Tetrahedron: Asymmetry *20 (2009) 1115*



$C_{22}H_{28}O_3$

(4*R*,5*R*,6*S*)-5,6-Bis(benzyloxy)oct-7-en-4-ol

$[\alpha]_D^{20} = +9.1$ (*c* 3.0, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (4*R*,5*R*,6*S*)

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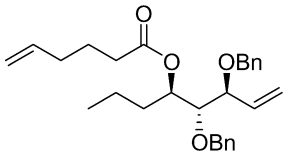
Tetrahedron: Asymmetry *20 (2009) 1115*



$C_{28}H_{36}O_4$

(4*R*,5*R*,6*S*)-5,6-Bis(benzyloxy)oct-7-en-4-yl hex-5-enoate

$[\alpha]_D^{20} = +6.4$ (*c* 2.6, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (4*R*,5*R*,6*S*)

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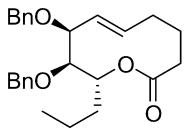
Tetrahedron: Asymmetry *20 (2009) 1115*



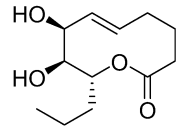
$[\alpha]_D^{20} = +13.5$ (*c* 1.1, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (8*S*,9*R*,10*R*,*E*)

$C_{26}H_{32}O_4$

(8*S*,9*R*,10*R*,*E*)-8,9-Bis(benzyloxy)-10-propyl-3,4,5,8,9,10-hexahydro-2H-oxecin-2-one

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



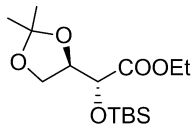
$[\alpha]_D^{20} = +11.5$ (*c* 0.5, EtOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (8*S*,9*S*,10*R*,*E*)

$C_{12}H_{20}O_4$

Herbarumin I

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



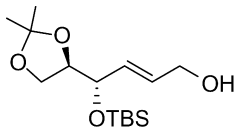
$[\alpha]_D^{20} = +24$ (*c* 1.5, $CHCl_3$)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*R*)

$C_{15}H_{30}O_5Si$

(*R*)-Ethyl 2-(*tert*-butyldimethylsilyloxy)-2-((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)acetate

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



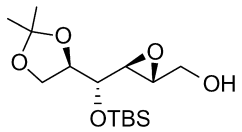
$[\alpha]_D^{20} = +6.9$ (*c* 4.0, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (4*S*,5*R*,*E*)

$C_{15}H_{30}O_4Si$

(*S*,*E*)-4-(*tert*-Butyldimethylsilyloxy)-4-((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)but-2-en-1-ol

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



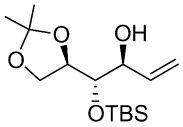
$[\alpha]_D^{20} = +15.5$ (*c* 4.0, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*S*,4*S*,5*R*)

$C_{15}H_{30}O_5Si$

((2*R*,3*S*)-3-((*R*)-(*tert*-Butyldimethylsilyloxy)((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)methyl)oxiran-2-yl)methanol

J. Jon Paul Selvam, K. Rajesh, V. Suresh, D. Chanti Babu, Y. Venkateswarlu *

Tetrahedron: Asymmetry *20 (2009) 1115*



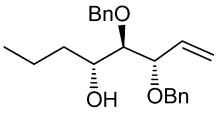
$[\alpha]_D^{20} = +27.7$ (*c* 1.5, MeOH)
Source of chirality: D-(−)-isoascorbic acid
Absolute configuration: (2*R*,3*S*,4*S*)

$C_{15}H_{30}O_4Si$

(1*S*,2*S*)-1-(*tert*-Butyldimethylsilyloxy)-1-((*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)but-3-en-2-ol

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



$[\alpha]_D^{25} = +62.1$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol and asymmetric synthesis
Absolute configuration: (4*R*,5*R*,6*S*)

$C_{22}H_{28}O_3$

(4*R*,5*R*,6*S*)-5,6-Di(benzyloxy)-7-octen-4-ol

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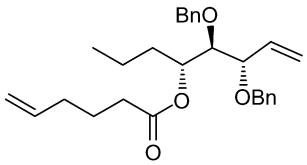
Tetrahedron: Asymmetry *20 (2009) 1120*



$[\alpha]_D^{25} = +68.2$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol and asymmetric synthesis
Absolute configuration: (1*R*,2*S*,3*S*)

$C_{28}H_{36}O_4$

[(1*R*,2*S*,3*S*)-2,3-Di(benzyloxy)-1-propyl-4-pentenyl]oxy-1,6-heptadiene

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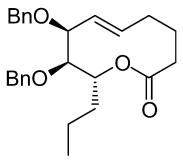
Tetrahedron: Asymmetry *20 (2009) 1120*



$[\alpha]_D^{25} = +43.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-mannitol and asymmetric synthesis
Absolute configuration: (1*R*,2*S*,3*S*)

$C_{26}H_{32}O_4$

(8*S*,9*S*,10*R*)-8,9-Di(benzyloxy)-10-propyl-3,4,5,8,9,10-hexahydro-2*H*-2-oxecinone

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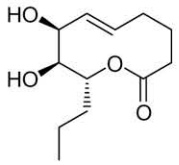
Tetrahedron: Asymmetry *20 (2009) 1120*



$[\alpha]_D^{25} = +10.6$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol and asymmetric synthesis
Absolute configuration: (8*S*,9*S*,10*R*)

$C_{12}H_{20}O_4$

(8*S*,9*S*,10*R*)-8,9-Dihydroxy-10-propyl-3,4,5,8,9,10-hexahydro-2*H*-2-oxecinone (or) herbarumin-I

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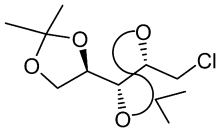
Tetrahedron: Asymmetry *20 (2009) 1120*



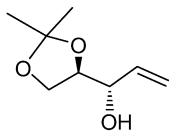
$[\alpha]_D^{25} = +12.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*R*,4*S*)

$C_{11}H_{21}ClO_4$

1,2:3,4-Di-*O*-isopropylidine-(2*R*,3*R*,4*S*)-5-chloropentane-1,2,3,4-tetraol

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



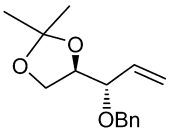
$[\alpha]_D^{25} = +2.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (1*S*,4*R*)

$C_8H_{14}O_3$

(1*S*)-1-[(4*R*)-2,2-Dimethyl-1,3-dioxolan-4-yl]-2-propen-1-ol

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



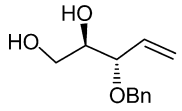
$C_{15}H_{20}O_3$

(4*R*)-4-[(1*S*)-1-(Benzyloxy)-2-propenyl]-2,2-dimethyl-1,3-dioxolane

$[\alpha]_D^{25} = +49.5$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (1*S*,4*R*)

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



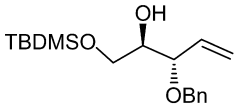
$C_{12}H_{16}O_3$

(2*R*,3*S*)-3-(Benzyloxy)-4-pentene-1,2-diol

$[\alpha]_D^{25} = +54.5$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*)

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



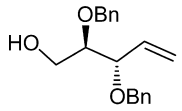
$C_{30}H_{18}O_3$

(2*R*,3*S*)-3-(Benzyloxy)-1-[1-methyl-1-(1,1,1-trimethylsilyl)ethoxy]-4-penten-2-ol

$[\alpha]_D^{25} = +26.5$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*)

Ahmed Kamal *, P. Venkat Reddy, S. Prabhakar

Tetrahedron: Asymmetry *20 (2009) 1120*



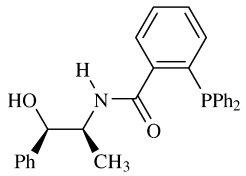
$C_{19}H_{22}O_3$

(2*R*,3*S*)-2,3-Di(benzyloxy)-4-penten-1-ol

$[\alpha]_D^{25} = +60.4$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-mannitol
Absolute configuration: (2*R*,3*S*)

Geetanjali S. Mahadik, Stanley A. Knott, Lisa F. Szczepura, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1132*



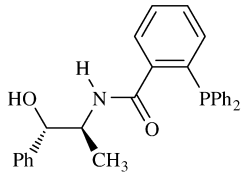
$[\alpha]_D^{23} = -15.6$ (*c* 0.10, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (1*R*,2*S*)

$C_{28}H_{25}NO_2P$

2-(Diphenylphosphino)-*N*-(1*R*,2*S*)-1-hydroxy-1-hydroxy-1-phenyl-2-propyl)benzamide

Geetanjali S. Mahadik, Stanley A. Knott, Lisa F. Szczepura, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1132*



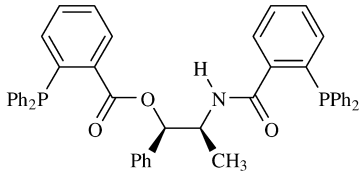
$[\alpha]_D^{24} = +11.3$ (*c* 0.10, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-pseudo norephedrine
Absolute configuration: (1*S*,2*S*)

$C_{28}H_{25}NO_2P$

2-(Diphenylphosphino)-*N*-(1*S*,2*S*)-1-hydroxy-1-hydroxy-1-phenyl-2-propyl)benzamide

Geetanjali S. Mahadik, Stanley A. Knott, Lisa F. Szczepura, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1132*



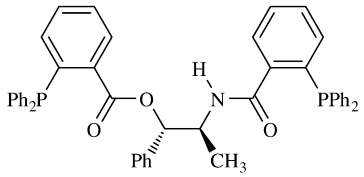
$[\alpha]_D^{23} = +7.8$ (*c* 0.10, $CHCl_3$)
Source of chirality: (1*R*,2*S*)-norephedrine
Absolute configuration: (1*R*,2*S*)

$C_{47}H_{39}NO_3P_2$

(1*R*,2*S*)-2-(2-Diphenylphosphino)benzamido)-1-phenylpropyl 2-(diphenylphosphino)benzoate

Geetanjali S. Mahadik, Stanley A. Knott, Lisa F. Szczepura, Shawn R. Hitchcock *

Tetrahedron: Asymmetry *20 (2009) 1132*



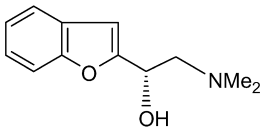
$[\alpha]_D^{23} = -16.9$ (*c* 0.10, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-pseudonorephedrine
Absolute configuration: (1*S*,2*S*)

$C_{47}H_{39}NO_3P_2$

(1*S*,2*S*)-2-(2-Diphenylphosphino)benzamido)-1-phenylpropyl 2-(diphenylphosphino)benzoate

Tomasz Kosmalski, Andrzej Wojtczak, Marek Zaidlewicz *

Tetrahedron: Asymmetry *20 (2009) 1138*



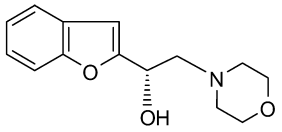
$C_{12}H_{15}NO_2$

(*S*)-(−)-1-(2-Benzofuryl)-2-(dimethylamino)ethanol

Ee = 98%
$[\alpha]_D^{20} = -46.5$ (*c* 3.20, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*), X-ray analysis

Tomasz Kosmalski, Andrzej Wojtczak, Marek Zaidlewicz *

Tetrahedron: Asymmetry *20 (2009) 1138*



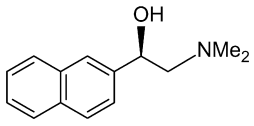
$C_{14}H_{17}NO_3$

(*S*)-(−)-1-(2-Benzofuryl)-2-(morpholin-4-yl)ethanol

Ee = 98%
$[\alpha]_D^{20} = -32.0$ (*c* 0.85, EtOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*), X-ray analysis

Tomasz Kosmalski, Andrzej Wojtczak, Marek Zaidlewicz *

Tetrahedron: Asymmetry *20 (2009) 1138*



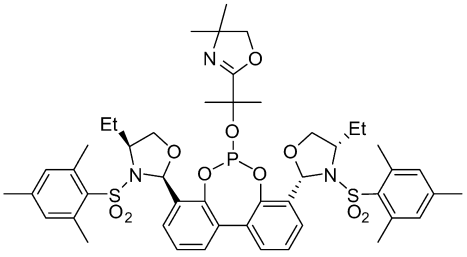
$C_{14}H_{17}NO$

(*R*)-(−)-2-(Dimethylamino)-1-(2-naphthyl)ethanol

Ee = 98%
$[\alpha]_D^{23} = -56.0$ (*c* 1.11, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (*R*), X-ray analysis

Yue-Lei Chen*, Roland Fröhlich, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1144*



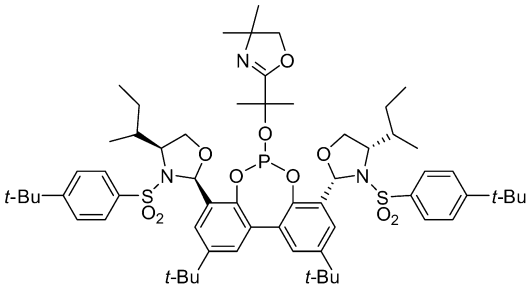
$C_{48}H_{60}N_3O_{10}PS_2$

(2*S*,2′*S*,4*S*,4′*S*)-2,2′-[6-(2-(4,4-Dimethyl-4,5-dihydrooxazol-2-yl)propan-2-yloxy)dibenzo- [*d*,*f*][1,3,2]dioxaphosphepine-4,8-diyl]bis[4-ethyl-3-(mesitylsulfonyl)oxazolidine]

Source of chirality: amino alcohol
$[\alpha]_D^{20} = -38.2$ (*c* 0.5, $CHCl_3$)
Absolute chemistry: (2*S*,2′*S*,4*S*,4′*S*)

Yue-Lei Chen*, Roland Fröhlich, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1144*



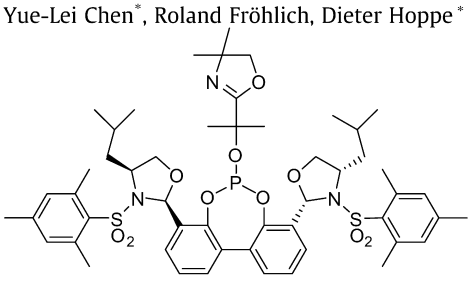
Source of chirality: amino alcohol
$[\alpha]_D^{20} = -3.4$ (*c* 0.5, $CHCl_3$)
Absolute chemistry: (2*S*,2′*S*,4*S*,4′*S*)

$C_{62}H_{88}N_3O_{10}PS_2$

(2*S*,2′*S*,4*S*,4′*S*)-2,2′-[2,10-Di-*tert*-butyl-6-(2-(4,4-dimethyl-4,5-dihydrooxazol-2-yl)propan-2-yl-oxy)dibenzo[*d*,*f*][1,3,2]dioxaphosphepine-4,8-diyl]bis[4-*sec*-butyl-3-(4-*tert*-butylphenylsulfonyl)oxazolidine]

Yue-Lei Chen*, Roland Fröhlich, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1144*



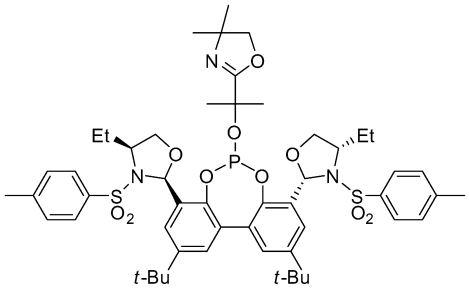
Source of chirality: amino alcohol
$[\alpha]_D^{20} = +30.2$ (*c* 0.5, $CHCl_3$)
Absolute chemistry: (2*S*,2′*S*,4*S*,4′*S*)

$C_{52}H_{68}N_3O_{10}PS_2$

(2*S*,2′*S*,4*S*,4′*S*)-2,2′-[6-(2-(4,4-Dimethyl-4,5-dihydrooxazol-2-yl)propan-2-yloxy)dibenzo-[*d*,*f*][1,3,2]dioxaphosphepine-4,8-diyl]bis[4-isobutyl-3-(mesitylsulfonyl)oxazolidine]

Yue-Lei Chen*, Roland Fröhlich, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1144*



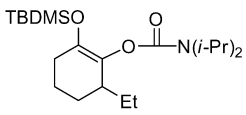
Source of chirality: amino alcohol
$[\alpha]_D^{20} = +3.3$ (*c* 0.5, $CHCl_3$)
Absolute chemistry: 2*S*,2′*S*,4*S*,4′*S*)

$C_{52}H_{68}N_3O_{10}PS_2$

(2*S*,2′*S*,4*S*,4′*S*)-2,2′-[2,10-Di-*tert*-butyl-6-(2-(4,4-dimethyl-4,5-dihydrooxazol-2-yl)propan-2-yl-oxy)dibenzo[*d*,*f*][1,3,2]dioxaphosphepine-4,8-diyl]bis[4-ethyl-3-tosyloxazolidine]

Yue-Lei Chen*, Roland Fröhlich, Dieter Hoppe *

Tetrahedron: Asymmetry *20 (2009) 1144*



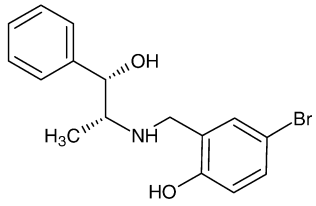
Source of chirality: asymmetric conjugate addition
$[\alpha]_D^{20} = +19.0$ (*c* 1, $CHCl_3$)
Ee = 82%
Absolute chemistry not determined

$C_{21}H_{41}NO_3S_i$

2-(*tert*-Butyldimethylsilyloxy)-6-ethylcyclohex-1-enyl *N*,*N*-diisopropylcarbamate

Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *

Tetrahedron: Asymmetry *20 (2009) 1150*



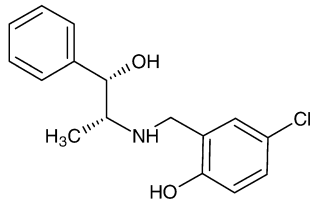
$C_{16}H_{18}BrNO_2$

4-Bromo-2-({[(1*S*,2*R*)-1-hydroxy-2-phenylpropyl]amino}methyl)phenol

$[\alpha]_D^{30} = +14$ (*c* 0.3, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine
Absolute configuration: (1*S*,2*R*)

Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *

Tetrahedron: Asymmetry *20 (2009) 1150*



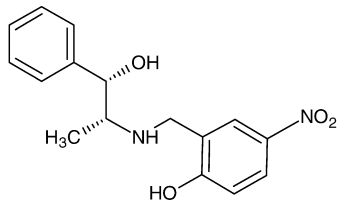
$C_{16}H_{18}ClNO_2$

4-Chloro-2-({[(1*S*,2*R*)-1-hydroxy-2-phenylpropyl]amino}methyl)phenol

$[\alpha]_D^{30} = +11.1$ (*c* 0.2, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine
Absolute configuration: (1*S*,2*R*)

Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *

Tetrahedron: Asymmetry *20 (2009) 1150*



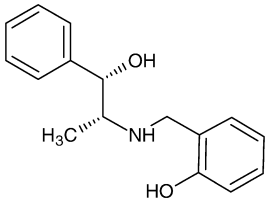
$C_{16}H_{18}N_2O_4$

2-({[(1*S*,2*R*)-2-Hydroxy-1-methyl-2-phenylethyl]amino}methyl)-4-nitrophenol

$[\alpha]_D^{30} = +53$ (*c* 0.2, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine
Absolute configuration: (1*S*,2*R*)

Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *

Tetrahedron: Asymmetry *20 (2009) 1150*



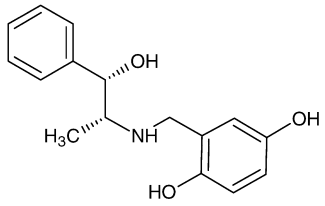
$C_{16}H_{19}NO_2$

2-({[(1*S*,2*R*)-2-Hydroxy-1-methyl-2-phenylethyl]amino}methyl)phenol

$[\alpha]_D^{30} = +17.6$ (*c* 0.25, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine
Absolute configuration: (1*S*,2*R*)

Umesh Balakrishnan, Nallamuthu Ananthi, Sivan Velmathi *

Tetrahedron: Asymmetry *20 (2009) 1150*



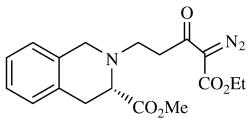
$C_{16}H_{19}NO_3$

$[\alpha]_D^{30} = +28$ (c 0.2, $CHCl_3$)
Source of chirality: (1*S*,2*R*)-(+)-norephedrine
Absolute configuration: (1*S*,2*R*)

2-({[(1*S*,2*R*)-1-Hydroxy-2-phenylpropyl]amino}methyl)benzene-1,4-diol

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



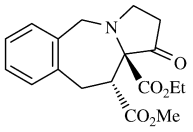
$C_{18}H_{21}N_3O_5$

Ee > 97%
$[\alpha]_D = +5.8$ (c 0.65, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (3*S*)

(*S*)-Methyl 2-(4-diazo-5-ethoxy-3,5-dioxopentyl)-1,2,3,4-tetrahydroisoquinoline-3-carboxylate

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



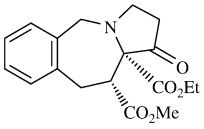
$C_{18}H_{21}NO_5$

Ee > 52%
$[\alpha]_D = -103.5$ (c 0.39, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (9*R*,9*aS*)

(9*R*,9a*S*)-9a-Ethyl-9-methyl-1-oxo-2,3,5,8,9,9a-hexahydro-1*H*-pyrrolo[1,2-*a*] benzo[*c*]azepine-9,9a-dicarboxylate

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



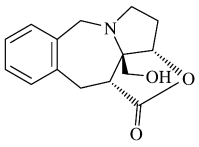
$C_{18}H_{21}NO_5$

Ee > 40%
$[\alpha]_D = -31.4$ (c 0.16, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (9*R*,9*aR*)

(9*R*,9a*R*)-9a-Ethyl-9-methyl-1-oxo-2,3,5,8,9,9a-hexahydro-1*H*-pyrrolo[1,2-*a*] benzo[*c*]azepine-9,9a-dicarboxylate

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



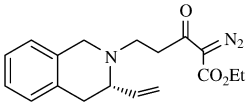
Ee > 97%
$[\alpha]_D = -35.4$ (*c* 0.20, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (2*aS*,9*R*,10*bR*)

$C_{15}H_{17}NO_3$

(2a*S*,4a*R*,10b*R*)-10b-Hydroxymethyl-1,2,2a,4a,5,10,10b-heptahydro-3-oxa-10a-aza-benzo[*e*]-cyclopenta-[*cd*]azulene-4-one

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



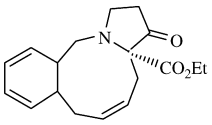
Ee > 97%
$[\alpha]_D = -21.8$ (*c* 0.63, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (3*S*)

$C_{18}H_{21}N_3O_3$

(*S*)-Ethyl 2-diazo-3-oxo-5-[3-vinyl-3,4-dihydroisoquinolin-2(1*H*)-yl] pentanoate

Daniele Muroni, Mauro Mucedda, Antonio Saba *

Tetrahedron: Asymmetry *20 (2009) 1154*



Ee > 95%
$[\alpha]_D = -6.4$ (*c* 0.44, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (13*aR*)

$C_{18}H_{21}NO_3$

(*R*,Z)-Ethyl 1-oxo-2.3.4,5,10,13,13a-heptahydro-1*H*-pyrrolo-benzo[*c*]-azonine-13a-carboxylate

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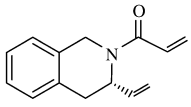
Tetrahedron: Asymmetry *20 (2009) 1154*



Ee > 97%
$[\alpha]_D = +56.4$ (*c* 0.37, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (3*S*)

$C_{14}H_{15}NO$

(*S*)-2-[1-Oxo-propenyl]-3-vinyl-3,4-dihydroisoquinolin-2(1*H*)-yl

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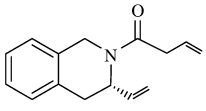
Tetrahedron: Asymmetry *20 (2009) 1154*



$C_{15}H_{17}NO$

(*S*)-2-[1-Oxo-butenyl]-3-vinyl-3,4-dihydroisoquinolin-2(1*H*)-yl

Ee > 97%
$[\alpha]_D = +52.9$ (*c* 0.46, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (3*S*)

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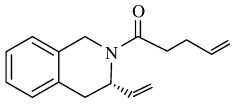
Tetrahedron: Asymmetry *20 (2009) 1154*



$C_{17}H_{19}NO$

(*S*)-2-[1-Oxo-4-pentenyl]-3-vinyl-3,4-dihydroisoquinolin-2(1*H*)-yl

Ee > 97%
$[\alpha]_D = +44.9$ (*c* 0.70, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (3*S*)

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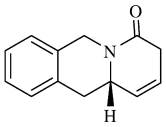
Tetrahedron: Asymmetry *20 (2009) 1154*



$C_{13}H_{13}NO$

(*S*)-3,11,11a-Trihydro-6*H*-pyridino[1,2-*b*]isoquinolin-4-one

Ee > 97%
$[\alpha]_D = -124.6$ (*c* 0.53, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (11*aS*)

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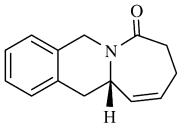
Tetrahedron: Asymmetry *20 (2009) 1154*



$C_{14}H_{15}NO$

(*S*)-3,4,12,12a-Tetrahydro-7*H*-azepino[1,2-*b*]isoquinolin-5-one

Ee > 97%
$[\alpha]_D = +35.1$ (*c* 0.47, $CHCl_3$)
Source of chirality: (*S*)-1,2,3,4-tetrahydro isoquinoline carboxylic acid
Absolute configuration: (12*aS*)

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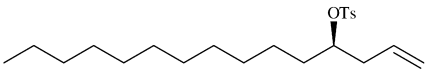
Tetrahedron: Asymmetry *20 (2009) 1160*



$C_{22}H_{36}O_3S$

(*R*)-Pentadec-1-en-4-yl 4-methylbenzenesulfonate

$[\alpha]_D$ = +9.6 (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*R*)

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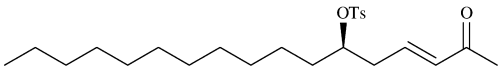
Tetrahedron: Asymmetry *20 (2009) 1160*



$C_{24}H_{38}O_4S$

(*R*,*E*)-2-Oxoheptadec-3-en-6-yl 4-methylbenzenesulfonate

$[\alpha]_D$ = +9.0 (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*E*,6*R*)

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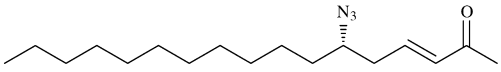
Tetrahedron: Asymmetry *20 (2009) 1160*



$C_{17}H_{31}N_3O$

(*S*,*E*)-6-Azidoheptadec-3-en-2-one

$[\alpha]_D$ = −2.6 (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*E*,6*S*)

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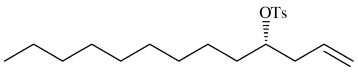
Tetrahedron: Asymmetry *20 (2009) 1160*



$C_{20}H_{32}O_3S$

(*S*)-Tridec-1-en-4-yl 4-methylbenzenesulfonate

$[\alpha]_D$ = −13.5 (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (4*S*)

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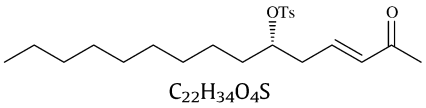
G. Venkateswar Reddy, K. Suresh Babu, J. Madhusudana Rao *

Tetrahedron: Asymmetry *20 (2009) 1160*



$C_{22}H_{34}O_4S$

(*S*,*E*)-2-Oxopentadec-3-en-6-yl 4-methylbenzenesulfonate

$[\alpha]_D = -22.9$ (*c* 0.75, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*E*,6*S*)

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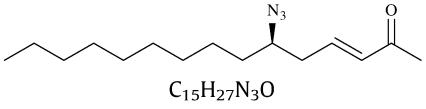
G. Venkateswar Reddy, K. Suresh Babu, J. Madhusudana Rao *

Tetrahedron: Asymmetry *20 (2009) 1160*



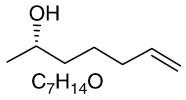
$C_{15}H_{27}N_3O$

(*R*,*E*)-6-Azidopentadec-3-en-2-one

$[\alpha]_D = -3.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*E*,6*R*)

Anubha Sharma *, Sunita Gamre, Subrata Chattopadhyay

Tetrahedron: Asymmetry *20 (2009) 1164*



$C_7H_{14}O$

(*S*)-6-Hepten-2-ol

$[\alpha]_D^{22} = +6.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (*S*)

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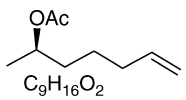
Tetrahedron: Asymmetry *20 (2009) 1164*



$C_9H_{16}O_2$

(*R*)-2-Acetoxyhept-6-ene

$[\alpha]_D^{22} = -1.5$ (*c* 1.58, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (*R*)

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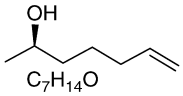
Tetrahedron: Asymmetry *20 (2009) 1164*



(*R*)-6-Hepten-2-ol

$[\alpha]_D^{22} = -6.8$ (*c* 1.22, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (*R*)

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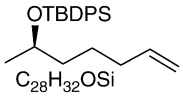
Tetrahedron: Asymmetry *20 (2009) 1164*



(*R*)-2-(*tert*-Butyldiphenylsilyloxy)hepte-6-ene

$[\alpha]_D^{22} = +13.2$ (*c* 1.14, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution
Absolute configuration: (*R*)

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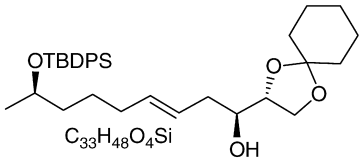
Tetrahedron: Asymmetry *20 (2009) 1164*



(2*R*,3*S*,10*R*)-10-(*tert*-Butyldiphenylsilyloxy)-1,2-cyclohexanedioxyundec-5-en-3-ol

$[\alpha]_D^{22} = +18.8$ (*c* 1.04, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (2*R*,3*S*,10*R*)

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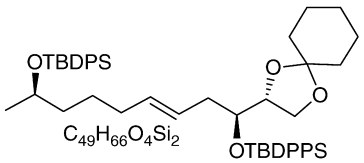
Tetrahedron: Asymmetry *20 (2009) 1164*



(2*R*,3*S*,10*R*)-3,10-Di-(*tert*-butyldiphenylsilyloxy)-1,2-cyclohexanedioxyundec-5-ene

$[\alpha]_D^{22} = +24.6$ (*c* 1.12, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (2*R*,3*S*,10*R*)

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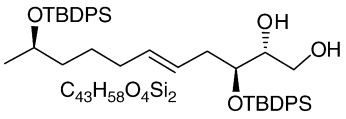
Tetrahedron: Asymmetry *20 (2009) 1164*



(2*R*,3*S*,10*R*)-3,10-Di-(*tert*-butyldiphenylsilyloxy)undec-5-ene-1,2-diol

$[\alpha]_D^{22} = +13.1$ (*c* 3.12, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (2*R*,3*S*,10*R*)

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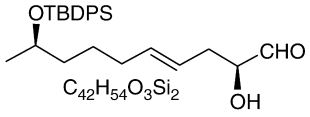
Tetrahedron: Asymmetry *20 (2009) 1164*



(2*S*,9*R*)-2,9-Di-(*tert*-butyldiphenylsilyloxy)dec-4-enal

$[\alpha]_D^{22} = +16.0$ (*c* 0.861, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (2*R*,9*R*)

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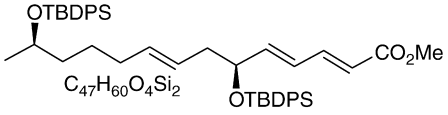
Tetrahedron: Asymmetry *20 (2009) 1164*



Methyl (6*S*,13*R*)-6,13-di-(*tert*-butyldiphenylsilyloxy)tetradeca-(2*E*,4*E*,8*E*)-trienoate

$[\alpha]_D^{22} = +8.9$ (*c* 0.842, $CHCl_3$)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (6*S*,13*R*)

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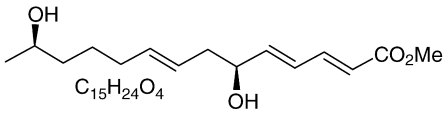
Tetrahedron: Asymmetry *20 (2009) 1164*

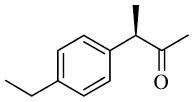


Methyl (6*S*,13*R*)-6,13-dihydroxy)tetradeca-(2*E*,4*E*,8*E*)-trienoate

$[\alpha]_D^{22} = +14.8$ (*c* 0.618, MeOH)
Source of chirality: lipase-catalyzed resolution and asymmetric reaction
Absolute configuration: (6*S*,13*R*)

Cristina Rodríguez, Gonzalo de Gonzalo, Daniel E. Torres Pazmiño, Marco W. Fraaije, Vicente Gotor *

Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{12}H_{16}O$

(*R*) 3-(4-Ethylphenyl)butan-2-one

Ee = 36% (GC, Restek RTβDEXse)
$[\alpha]_D^{25} = -12.8$ (*c* 0.80, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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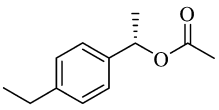
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{12}H_{16}O_2$

(*S*)-1-(4-Ethylphenyl)ethyl acetate

Ee = 86% (GC, Restek RTβDEXse)
$[\alpha]_D^{25} = +35.9$ (*c* 0.74, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

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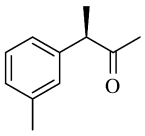
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{11}H_{14}O$

(*R*)-1-(3-Methylphenyl)butan-2-one

Ee = 42% (GC, CP-Chiralsil DEX CB)
$[\alpha]_D^{25} = -21.8$ (*c* 1.18, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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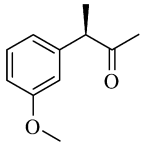
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{11}H_{14}O_2$

(*R*)-1-(3-Methoxyphenyl)butan-2-one

Ee = 71% (GC, Restek RTβDEXse)
$[\alpha]_D^{25} = -31.6$ (*c* 1.40, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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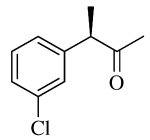
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{10}H_{11}ClO$

(*R*)-1-(3-Chlorophenyl)butan-2-one

Ee = 27% (GC, Restek RTβDEXse)
$[\alpha]_D^{25} = -12.0$ (*c* 0.98, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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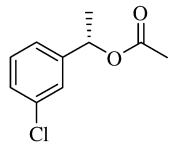
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{10}H_{11}ClO_2$

(*S*)-1-(3-Chlorophenyl)ethyl acetate

Ee = 92% (GC, Restek RTβDEXse)
$[\alpha]_D^{25} = +67.8$ (*c* 0.78, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

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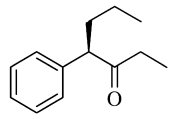
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{13}H_{18}O$

(*R*)-4-Phenylheptan-3-one

Ee = 29% (Calculated)
$[\alpha]_D^{25} = -10.8$ (*c* 1.12, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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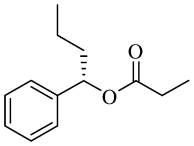
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{13}H_{18}O_2$

(*S*)-1-Phenylbutyl propionate

Ee = 96% (GC, Hydrodex-β-TBOAc)
$[\alpha]_D^{25} = +35.8$ (*c* 0.91, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

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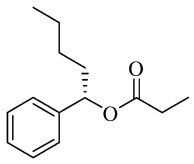
Tetrahedron: Asymmetry *20 (2009) 1168*



$C_{14}H_{20}O_2$

(S)-1-Phenylpentyl propionate

Ee = 95% (GC, Hydrodex-β-TBOAc)
$[\alpha]_D^{25} = +21.2$ (*c* 0.58, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

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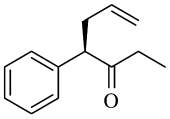

$C_{13}H_{16}O$

(*R*)-4-Phenylhept-6-en-3-one

Ee = 38% (calculated)
$[\alpha]_D^{25} = -7.2$ (*c* 0.85, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*R*)

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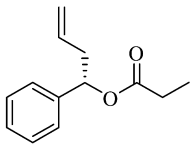

$C_{13}H_{16}O_2$

(*S*)-4-Phenylbut-1-enyl propionate

Ee = 77% (GC, Hydrodex-β-TBOAc)
$[\alpha]_D^{25} = +16.9$ (*c* 0.65, $CHCl_3$)
Source of chirality: enzymatic oxidation
Absolute configuration: (*S*)

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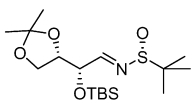

$C_{17}H_{35}NO_4SSi$

(S_R,2*S*,3*S*)-(−)-*N*-(2-*tert*-Butyldimethylsilyloxy-3,4-isopropylidenedioxy)butylidine-*tert*-butanesulfinamide

$[\alpha]_D^{20} = -129$ (*c* 1.37, $CHCl_3$)
Source of chirality: L-ascorbic acid and (*R*)-(+)-*tert*-butanesulfinamide
Absolute configuration: (S_R,2*S*,3*S*)

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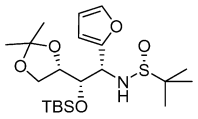

$[\alpha]_D^{20} = +11$ (*c* 1.13, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (*S*$_R$,1*R*,2*S*,3*S*)

$C_{21}H_{39}NO_5SSi$

(*S*$_R$,1*R*,2*S*,3*S*)-(+)-*N*-(2-*tert*-Butyldimethylsilyloxy-1-(2-furyl)-3,4-isopropylidenedioxy)butyl-*tert*-butanesulfinamide

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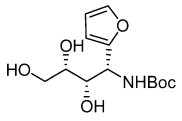

$[\alpha]_D^{20} = +63$ (*c* 0.82, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*S*,3*S*)

$C_{13}H_{21}NO_6$

tert-Butyl (1*R*,2*S*,3*S*)-1-(2-furyl)-2,3,4-trihydroxybutylcarbamate

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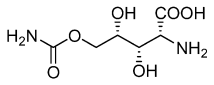

$[\alpha]_D^{20} = +0.7$ (*c* 0.64, H_2O)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*R*,2*S*,3*S*)

$C_6H_{12}N_2O_6$

(+)-5-*O*-Carbamoyl-2-*epi*-polyoxamic acid

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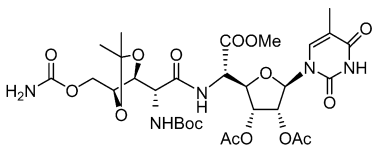

$[\alpha]_D^{20} = +7$ (*c* 0.84, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1′*R*,2′*R*,3′*R*,4′*R*,5′*S*,2″*R*,3″*S*,4″*S*)

$C_{30}H_{43}N_5O_{16}$

(+)-Protected 2″-*epi*-polyoxin J

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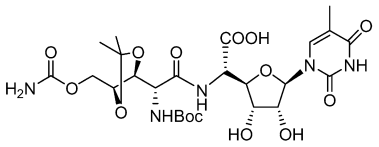

$C_{25}H_{37}N_5O_{14}$

(−)-*N*-Boc-3″,4″-*O*-diisopropylidene-5″-*O*-carbamoyl-2″-epi-polyoxin J

$[\alpha]_D^{20} = -0.6$ (*c* 0.71, MeOH)
Source of chirality: asymmetric synthesis
Absolute configuration: (1′*R*,2′*R*,3′*R*,4′*R*,5′*S*,2″*R*,3″*S*,4″*S*)

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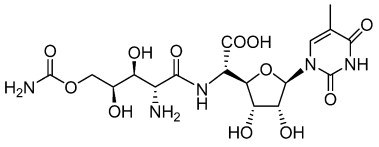

$C_{17}H_{25}N_5O_{12}$

(+)-2″-*epi*-Polyoxin J

$[\alpha]_D^{20} = +1.1$ (*c* 0.61, H_2O)
Source of chirality: asymmetric synthesis
Absolute configuration: (1′*R*,2′*R*,3′*R*,4′*R*,5′*S*,2″*R*,3″*S*,4″*S*)

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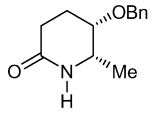
Tetrahedron: Asymmetry *20 (2009) 1181*



$C_{13}H_{17}NO_2$

(5*S*,6*S*)-5-Benzyloxy-6-methyl-2-piperidinone

$[\alpha]_D^{20} = +9.4$ (*c* 0.5, $CHCl_3$)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (5*S*,6*S*)

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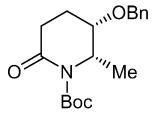
Tetrahedron: Asymmetry *20 (2009) 1181*



$C_{18}H_{25}NO_4$

(5*S*,6*S*)-5-Benzyloxy-1-(*tert*-butyloxycarbonyl)-6-methyl-2-piperidinone

$[\alpha]_D^{20} = +8.9$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (5*S*,6*S*)

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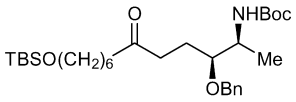

$[\alpha]_D^{20} = -13.5$ (*c* 0.9, $CHCl_3$)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (2*S*,3*S*)

$C_{30}H_{53}NO_5Si$

tert-Butyl [(2*S*,3*S*)-3-benzyloxy-12-(*tert*-butyldimethylsilyloxy)-6-oxododecan]-2-yl carbamate

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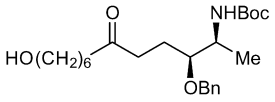
Tetrahedron: Asymmetry *20 (2009) 1181*



$[\alpha]_D^{20} = -24.6$ (*c* 0.8, $CHCl_3$)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (2*S*,3*S*)

$C_{24}H_{39}NO_5$

tert-Butyl [(2*S*,3*S*)-3-benzyloxy-12-hydroxy-6-oxododecan]-2-yl carbamate

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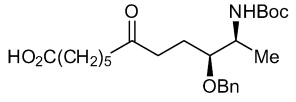
Tetrahedron: Asymmetry *20 (2009) 1181*



$[\alpha]_D^{20} = -15.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (10*S*,11*S*)

$C_{24}H_{37}NO_6$

(10*S*,11*S*)-10-Benzyloxy-11-(*tert*-butoxycarbonylamino)-7-oxododecanoic acid

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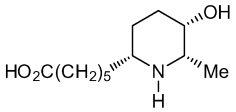
Tetrahedron: Asymmetry *20 (2009) 1181*



$[\alpha]_D^{20} = +7.7$ (*c* 0.5, MeOH)
Source of chirality: (*S*)-glutamic acid
Absolute configuration: (2*S*,3*S*,6*R*)

$C_{12}H_{23}NO_3$

(+)-(2*S*,3*S*,6*R*)-Azimic acid

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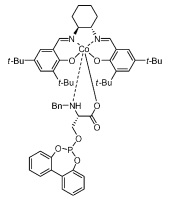
Tetrahedron: Asymmetry *20 (2009) 1185*



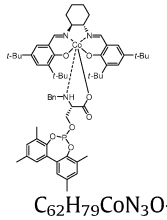
$[\alpha]_D^{23} = -681.8$ (*c* 0.094, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-cyclohexane-1,2-diamine; (*S*)-2-(benzylamino)-3-hydroxypropanoic acid (*N*-benzyl-L-serine)
Absolute configuration: (*S*,*S*,*S*)

$C_{58}H_{71}CoN_3O_7P$

(*S*,*S*)-*N*,*N*′-Bis(3,5-di-*tert*-butylsalicylidene)-1,2-cyclohexanediaminocobalt(III) (*S*)-*N*-Benzyl Serinate-biphenyl-2,2′-diol-phosphite

Stefano Carboni, Luca Pignataro, Cesare Gennari *, Umberto Piarulli *

Tetrahedron: Asymmetry *20 (2009) 1185*



$[\alpha]_D^{23} = -1050.8$ (*c* 0.077, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-cyclohexane-1,2-diamine; (*S*)-2-(benzylamino)-3-hydroxypropanoic acid (*N*-benzyl-L-serine)
Absolute configuration: (*S*,*S*,*S*)

$C_{62}H_{79}CoN_3O_7P$

(*S*,*S*)-*N*,*N*′-Bis(3,5-di-*tert*-butylsalicylidene)-1,2-cyclohexanediaminocobalt(III) (*S*)-*N*-benzyl serinate-3,3′,5,5′-tetramethylbiphenyl-2,2′-diol-phosphite

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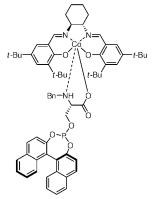
Tetrahedron: Asymmetry *20 (2009) 1185*



$[\alpha]_D^{22} = -775.2$ (*c* 0.078, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-cyclohexane-1,2-diamine; (*S*)-2-(benzylamino)-3-hydroxypropanoic acid (*N*-benzyl-L-serine) and (S_a)-1,1′-binaphthyl-2,2′-diol
Absolute configuration: (*S*,*S*,*S*,S_a)

$C_{66}H_{75}CoN_3O_7P$

(*S*,*S*)-*N*,*N*′-Bis(3,5-di-*tert*-butylsalicylidene)-1,2-cyclohexanediaminocobalt(III) (*S*)-*N*-benzyl serinate-(S_a)-1,1′-binaphthyl-2,2′-diol-phosphite

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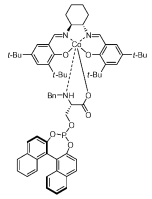
Tetrahedron: Asymmetry *20 (2009) 1185*



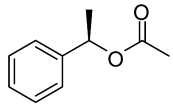
$[\alpha]_D^{23} = -1227.3$ (*c* 0.055, $CHCl_3$)
Source of chirality: (1*S*,2*S*)-cyclohexane-1,2-diamine; (*S*)-2-(benzylamino)-3-hydroxypropanoic acid (*N*-benzyl-L-serine), and (R_a)-1,1′-binaphthyl-2,2′-diol
Absolute configuration: (*S*,*S*,*S*,R_a)

$C_{66}H_{75}CoN_3O_7P$

(*S*,*S*)-*N*,*N*′-Bis(3,5-di-*tert*-butylsalicylidene)-1,2-cyclohexanediaminocobalt(III) (*S*)-*N*-benzyl serinate-(R_a)-1,1′-binaphthyl-2,2′-diol-phosphite

Robert Chênevert *, Nicholas Pelchat, Pierre Morin

Tetrahedron: Asymmetry *20 (2009) 1191*



$C_{10}H_{12}O_2$

(*R*)-1-Phenylethyl acetate

Ee = >98% (Chiral GC)
$[\alpha]_D^{20} = +43$ (*c* 2.1, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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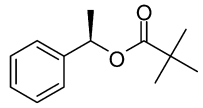

$C_{13}H_{18}O_2$

(*R*)-1-Phenylethyl pivaloate

Ee = 92% (Chiral HPLC)
$[\alpha]_D^{20} = -5.8$ (*c* 0.5, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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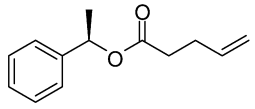

$C_{13}H_{16}O_2$

(*R*)-1-Phenylethyl pent-4-enoate

Ee = 95% (Chiral HPLC)
$[\alpha]_D^{20} = +64$ (*c* 2.4, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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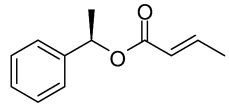

$C_{12}H_{14}O_2$

(*R*)-1-Phenylethyl crotonate

Ee = >98% (Chiral HPLC)
$[\alpha]_D^{20} = +11$ (*c* 1.2, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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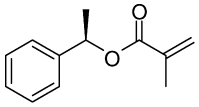

$C_{12}H_{14}O_2$

(*R*)-1-Phenylethyl methacrylate

Ee = >98% (Chiral HPLC)
$[\alpha]_D^{20} = +50$ (*c* 0.88, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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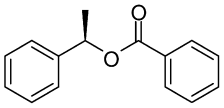

$C_{15}H_{14}O_2$

(*R*)-1-Phenylethyl benzoate

Ee = 92% (Chiral HPLC)
$[\alpha]_D^{20} = -2.3$ (*c* 1.2, EtOH)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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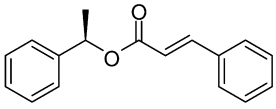
Tetrahedron: Asymmetry *20 (2009) 1191*



$C_{17}H_{16}O_2$

(*R*)-1-Phenylethyl cinnamate

Ee = >98% (Chiral HPLC)
$[\alpha]_D^{20} = -39$ (*c* 1.5, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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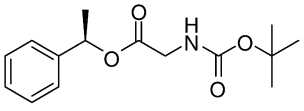

$C_{15}H_{21}NO_4$

(*R*)-1-Phenylethyl *N*-Boc glycinate

Ee = >98% (Chiral HPLC)
$[\alpha]_D^{20} = +15$ (*c* 1.15, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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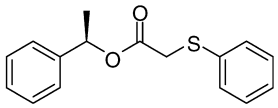

$C_{16}H_{16}O_2S$

(*R*)-1-Phenylethyl 2-(phenylthio)acetate

Ee = 94% (Chiral HPLC)
$[\alpha]_D^{20} = +49$ (*c* 3.0, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (1*R*)

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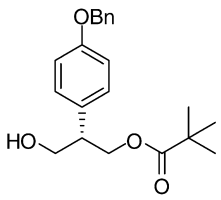

$C_{21}H_{26}O_4$

(*S*)-2-(4-(Benzyloxy)phenyl)-3-hydroxypropyl pivaloate

Ee = >98% (Chiral HPLC)
$[\alpha]_D^{20} = +12.9$ (*c* 0.64, $CHCl_3$)
Source of chirality: enzymatic desymmetrization
Absolute configuration: (2*S*)

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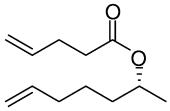

$C_{12}H_{20}O_2$

(*R*)-Hept-6-en-yl pent-4-enoate

Ee = 95% (Chiral GC)
$[\alpha]_D^{20} = -5.51$ (*c* 2.06, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (2*R*)

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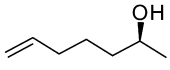

$C_7H_{14}O$

(*S*)-Hept-6-en-2-ol

Ee = 98%
$[\alpha]_D^{20} = +10.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (2*S*)

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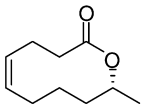

$C_{10}H_{16}O_2$

(*R*,*Z*)-10-Methyl-3,4,7,8,9,10-hexahydro-2*H*-oxecin-2-one (Phoracantholide J)

Ee = 95%
$[\alpha]_D^{20} = -31.9$ (*c* 1.09, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (2*R*)

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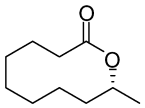

$C_{10}H_{18}O_2$

(*R*)-10-Methyloxecan-2-one (Phoracantholide I)

Ee = 95%
$[\alpha]_D^{20} = -33.5$ (*c* 3.0, $CHCl_3$)
Source of chirality: enzymatic kinetic resolution
Absolute configuration: (2*R*)

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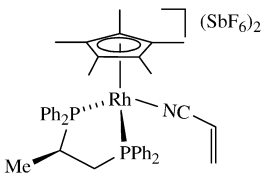

$C_{40}H_{44}F_{12}NP_2RhSb_2$

($S_{Rh}R_c$)-(Acrilonitrile)(η^5-pentamethylcyclopentadienyl)(prophos)rhodium(III) hexafluoroantimoniate

Ee = 100
$[\alpha]_D^{27} = -26.7$ (*c* 0.5, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Rh}R_C$)

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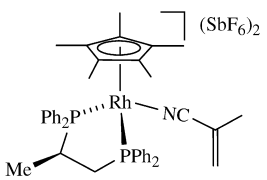
Tetrahedron: Asymmetry *20 (2009) 1197*



$C_{41}H_{46}F_{12}NP_2RhSb_2$

($S_{Rh}R_c$)-(Methacrilonitrile)(η^5-pentamethylcyclopentadienyl)(prophos)rhodium(III) hexafluoroantimoniate

Ee = 100
$[\alpha]_D^{27} = -20.8$ (*c* 0.5, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Rh}R_C$)

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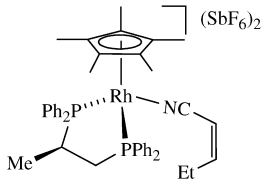
Tetrahedron: Asymmetry *20 (2009) 1197*



Ee = 100
$[\alpha]_D^{27} = -31.2$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Rh}R_C$)

$C_{42}H_{48}F_{12}NP_2RhSb_2$

($S_{Rh}R_c$)-(*cis*-2-Pentenenitrile)(η^5-pentamethylcyclopentadienyl)(prophos)rhodium(III) hexafluoroantimoniate

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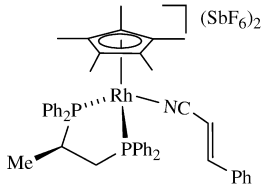

Ee = 100
$[\alpha]_D^{24} = -90.2$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Rh}R_C$)

$C_{46}H_{48}F_{12}NP_2RhSb_2$

($S_{Rh}R_c$)-(*trans*-Cinnamonitrile)(η^5-pentamethylcyclopentadienyl)(prophos)rhodium(III) hexafluoroantimoniate

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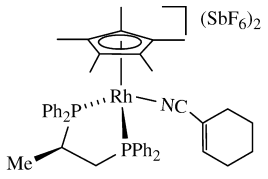

Ee = 100
$[\alpha]_D^{27} = -28.9$ (*c* 0.5, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Rh}R_C$)

$C_{44}H_{50}F_{12}NP_2RhSb_2$

($S_{Rh}R_c$)-(1-Cyclohexen-1-nitrile)(η^5-pentamethylcyclopentadienyl)(prophos)rhodium(III) hexafluoroantimoniate

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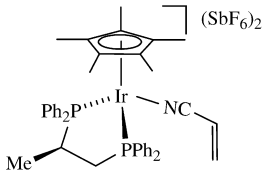

Ee = 100
$[\alpha]_D^{26} = -46.3$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Ir}R_C$)

$C_{40}H_{44}F_{12}IrNP_2Sb_2$

($S_{Ir}R_c$)-(Acrilonitrile)(η^5-pentamethylcyclopentadienyl)(prophos)iridium(III) hexafluoroantimoniate

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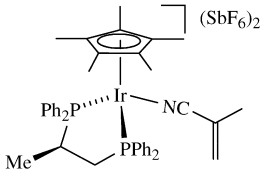

Ee = 100
$[\alpha]_D^{27} = -36.9$ (*c* 0.7, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Ir}R_C$)

$C_{41}H_{46}IrF_{12}NP_2Sb_2$

($S_{Ir}R_c$)-(Methacrilonitrile)(η^5-pentamethylcyclopentadienyl)(prophos)iridium(III) hexafluoroantimoniate

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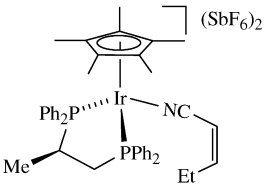
Tetrahedron: Asymmetry *20 (2009) 1197*



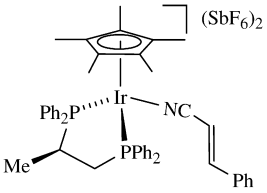
Ee = 100
$[\alpha]_D^{25} = -48.9$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Ir}R_C$)

$C_{42}H_{48}IrF_{12}NP_2Sb_2$

($S_{Ir}R_c$)-(*cis*-2-Pentenenitrile)(η^5-pentamethylcyclopentadienyl)(prophos)iridium(III) hexafluoroantimoniate

Daniel Carmona *, M. Pilar Lamata, Fernando Viguri, Ricardo Rodríguez, Fernando J. Lahoz, M. José Fabra, Luis A. Oro

Tetrahedron: Asymmetry *20 (2009) 1197*



Ee = 100
$[\alpha]_D^{26} = -90.1$ (*c* 0.6, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: ($S_{Ir}R_C$)

$C_{46}H_{48}IrF_{12}NP_2Sb_2$

($S_{Ir}R_c$)-(*trans*-Cinnamonitrile)(η^5-pentamethylcyclopentadienyl)(prophos))iridium(III) hexafluoroantimoniate

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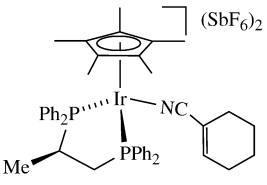
Tetrahedron: Asymmetry *20 (2009) 1197*



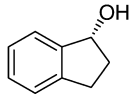
Ee = 100
$[\alpha]_D^{26} = -48.0$ (*c* 0.7, CH_2Cl_2)
Source of chirality: (*R*)-prophos
Absolute configuration: $S_{Ir}R_C$)

$C_{44}H_{50}IrF_{12}NP_2Sb_2$

($S_{Ir}R_c$)-(1-Cyclohexen-1-nitrile)(η^5-pentamethylcyclopentadienyl)(prophos))iridium(III) hexafluoroantimoniate

Felicia Lie, Yongzheng Chen, Zunsheng Wang, Zhi Li *

Tetrahedron: Asymmetry *20 (2009) 1206*



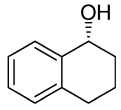
$C_9H_{10}O$

(*R*)-2,3-Dihydro-1*H*-inden-1-ol

$[\alpha]_D^{22} = -35.2$ (*c* 1.05, $CHCl_3$)
Ee >99%
Source of chirality: enzyme catalysis
Absolute configuration: (*R*)

Felicia Lie, Yongzheng Chen, Zunsheng Wang, Zhi Li *

Tetrahedron: Asymmetry *20 (2009) 1206*



$C_9H_{10}O$

(*R*)-1,2,3,4-Tetrahydronaphthalen-1-ol

$[\alpha]_D^{22} = -34.9$ (*c* 1.12, $CHCl_3$)
Ee >99%
Source of chirality: enzyme catalysis
Absolute configuration: (*R*)