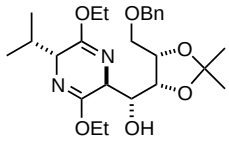
María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



$[\alpha]_D^{25} = +37.9$ (c 1.9, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*S*,6*R*,1′*R*,2′*R*,3′*S*

$C_{25}H_{38}N_2O_6$

(3*S*,6*R*,1′*R*,2′*R*,3′*S*)-3-[4-Benzyloxy-1-hydroxy-2,3-isopropylidenedioxybutyl]-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

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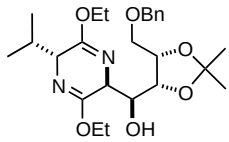
María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



$[\alpha]_D^{25} = +5.7$ (c 2.4, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*S*,6*R*,1′*S*,2′*R*,3′*S*

$C_{25}H_{38}N_2O_6$

(3*S*,6*R*,1′*S*,2′*R*,3′*S*)-3-[4-Benzyloxy-1-hydroxy-2,3-isopropylidenedioxybutyl]-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

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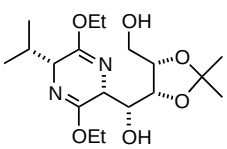
María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



$[\alpha]_D^{21} = -30.2$ (c 2.2, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*R*,6*R*,1′*R*,2′*R*,3′*S*

$C_{18}H_{32}N_2O_6$

(3*R*,6*R*,1′*R*,2′*R*,3′*S*)-3-[1,4-Dihydroxy-2,3-isopropylidenedioxybutyl]-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

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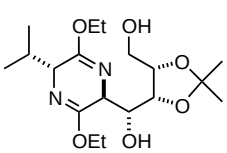
María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



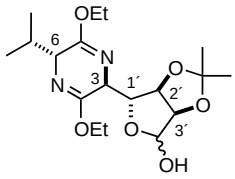
$[\alpha]_D^{26} = +38.0$ (c 1.6, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 3*S*,6*R*,1′*R*,2′*R*,3′*S*

$C_{18}H_{32}N_2O_6$

(3*S*,6*R*,1′*R*,2′*R*,3′*S*)-3-[1,4-Dihydroxy-2,3-isopropylidenedioxybutyl]-2,5-diethoxy-3,6-dihydro-6-isopropylpyrazine

María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



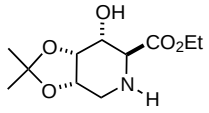
$[\alpha]_D^{25} = -18.6$ (final, *c* 1.2, CH_2Cl_2)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 4*R*,5*R*,6*R*,5′*R*,2′*S*

$C_{18}H_{30}N_2O_6$

(4*R*,5*R*,6*R*,5′*R*,2′*S*,)-6-(3,6-Diethoxy-5-isopropyl-2,5-dihydro-pyrazin-2-yl)-2,2-dimethyl-tetrahydrofuro[3,4-*d*][1,3]dioxol-4-ol

María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



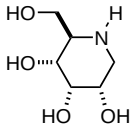
$[\alpha]_D^{26} = +34.4$ (*c* 0.7, MeOH)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*S*,3*R*,4*S*,5*S*

$C_{11}H_{19}NO_5$

Ethyl (2*S*,3*R*,4*S*,5*S*)-3-Hydroxy-4,5-isopropylidenedioxypipecolate

María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



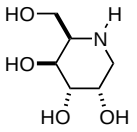
$[\alpha]_D^{26} = +30.5$ (*c* 1.0, H_2O)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*S*,3*S*,4*R*,5*R*

$C_6H_{13}NO_4$

1-Deoxy-D-allonojirimycin

María Ruiz,* Vicente Ojea, Tania M. Ruanova and José M. Quintela

Tetrahedron: Asymmetry *13 (2002) 795*



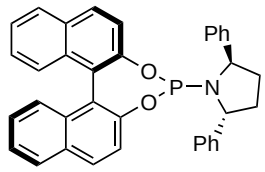
$[\alpha]_D^{25} = -13.9$ (*c* 0.3, EtOH)
Source of chirality: asymmetric aldol reaction
Absolute configuration: 2*S*,3*S*,4*S*,5*R*

$C_6H_{13}NO_4$

1-Deoxy-D-gulonojirimycin

Yong Hyun Choi, Jun Young Choi, Hye Yon Yang and Yong Hae Kim*

Tetrahedron: Asymmetry *13 (2002) 801*



Ee >99.8%

$[\alpha]_D = +556.2$ (c 1.0, $CHCl_3$)

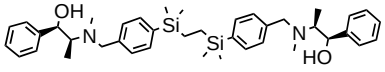
Source of chirality: asymmetric synthesis and (*R*)-1,1′-binaphthalenyl-2,2′-diol

$C_{36}H_{28}NO_2P$

O,*O*-(*R*)-(1,1′-Dinaphtyl-2,2′-diyl)-4-(*R*,*R*-2,5-diphenylpyrrolidine)-(*R*)-dinaphthodioxaphosphephine

Itaru Sato, Ryo Kodaka, Kenji Hosoi and Kenso Soai*

Tetrahedron: Asymmetry *13 (2002) 805*



$[\alpha]_D^{25}$ −36.9 (c 1.00, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-ephedrine as starting material

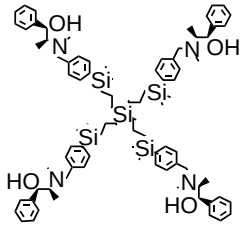
Absolute configuration: 1′*S*,2′*R*

$C_{40}H_{56}N_2O_2Si_2$

1,2-Di{{4-[*N*-(1′*S*,2′*R*)-2′-hydroxy-1′-methyl-2′-phenylethyl-*N*-methyl]aminomethylphenyl}dimethylsilyl}ethane

Itaru Sato, Ryo Kodaka, Kenji Hosoi and Kenso Soai*

Tetrahedron: Asymmetry *13 (2002) 805*



$[\alpha]_D^{25}$ −26.8 (c 1.00, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-ephedrine as starting material

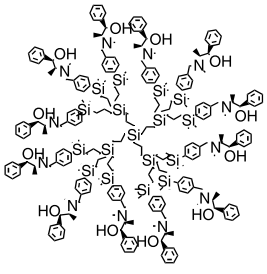
Absolute configuration: 1′*S*,2′*R*

$C_{88}H_{128}N_4O_4Si_5$

Tetra{3-{4-[*N*-(1′*S*,2′*R*)-2′-hydroxy-1′-methyl-2′-phenylethyl-*N*-methyl]aminomethylphenyl}dimethylsilyl}propyl}silane

Itaru Sato, Ryo Kodaka, Kenji Hosoi and Kenso Soai*

Tetrahedron: Asymmetry *13 (2002) 805*



$[\alpha]_D^{22}$ −21.5 (c 1.00, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-ephedrine as starting material

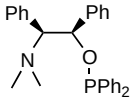
Absolute configuration: 1′*S*,2′*R*

$C_{276}H_{408}N_{12}O_{12}Si_{17}$

Tetra{{3-{tri{3-{4-[*N*-(1′*S*,2′*R*)-2′-hydroxy-1′-methyl-2′-phenylethyl-*N*-methyl]aminomethylphenyl}dimethylsilyl}propyl}silyl}propyl}silane

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{28}H_{28}NOP$

(1*R*,2*S*)-*N*,*N*-Dimethyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

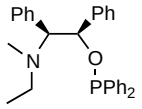
$[\alpha]_D^{20} = -14.5$ ($c = 0.2$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{29}H_{30}NOP$

(1*R*,2*S*)-*N*-Ethyl-*N*-methyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

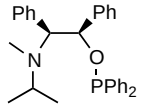
$[\alpha]_D^{20} = +38.7$ ($c = 0.7$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{30}H_{32}NOP$

(1*R*,2*S*)-*N*-(2-Propyl)-*N*-methyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

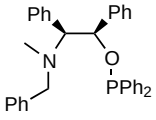
$[\alpha]_D^{20} = -39.2$ ($c = 0.36$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{35}H_{34}NOP$

(1*R*,2*S*)-*N*-Benzyl-*N*-methyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

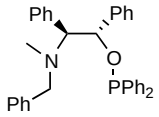
$[\alpha]_D^{20} = +3.0$ ($c = 3.1$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{35}H_{34}NOP$

(1*S*,2*S*)-*N*-Benzyl-*N*-methyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

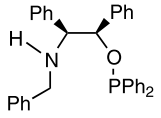
$[\alpha]_D^{20} = -24.9$ ($c = 0.86$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*S*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{34}H_{32}NOP$

(1*R*,2*S*)-*N*-Benzyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

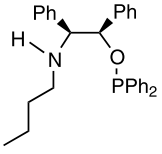
$[\alpha]_D^{20} = -20.7$ ($c = 3.8$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{30}H_{32}NOP$

(1*R*,2*S*)-*N*-Butyl-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

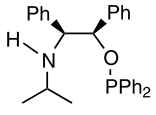
$[\alpha]_D^{20} = -37.0$ ($c = 1.94$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Guoshu Chen, Xin Li, Haile Zhang, Liuzhu Gong,* Aiqiao Mi,* Xin Cui, Yaozhong Jiang, Michael C. K. Choi and Albert S. C. Chan

Tetrahedron: Asymmetry *13 (2002) 809*



$C_{29}H_{30}NOP$

(1*R*,2*S*)-*N*-(2-Propyl)-*O*-diphenylphosphino-1,2-diphenyl-2-aminoethanol

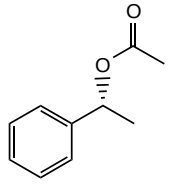
$[\alpha]_D^{20} = -13.9$ ($c = 0.6$, $CHCl_3$)

Source of chirality: (1*R*,2*S*)-1,2-diphenyl-2-aminoethanol

Absolute configuration: 1*R*,2*S*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{10}H_{12}O_2$

(1*R*)-1-Phenylethyl acetate

E.e. >99.0% [by chiral HPLC]

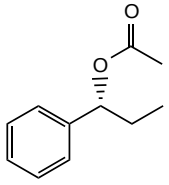
$[\alpha]_D^{25} = +86.7$ (*c* 1.5, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{11}H_{14}O_2$

(1*R*)-1-Phenylpropyl acetate

E.e. >99.0% [by chiral HPLC]

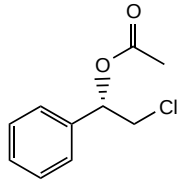
$[\alpha]_D^{25} = +104.7$ (*c* 1.7, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{10}H_{11}ClO_2$

(1*S*)-2-Chloro-1-phenylethyl acetate

E.e. >99.0% [by chiral HPLC]

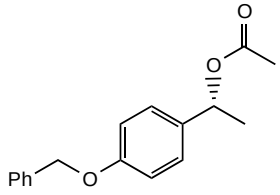
$[\alpha]_D^{25} = +76.6$ (*c* 1.1, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *S*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{17}H_{18}O_3$

(1*R*)-1-(4-Benzyloxyphenyl)ethyl acetate

E.e. = 98.0% [by chiral HPLC]

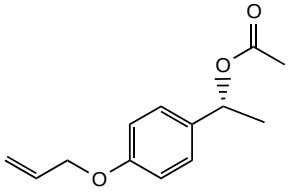
$[\alpha]_D^{25} = +89.8$ (*c* 1.4, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{13}H_{16}O_3$

(1*R*)-1-(4-Allyloxyphenyl)ethyl acetate

E.e. >99% [by chiral HPLC]

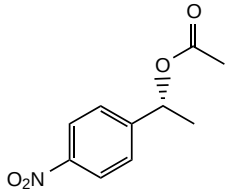
$[\alpha]_D^{25} = +116.5$ (*c* 1.2, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{10}H_{11}NO_4$

(1*R*)-1-(4-Nitrophenyl)ethyl acetate

E.e. >99% [by chiral HPLC]

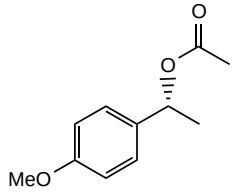
$[\alpha]_D^{25} = +99.2$ (*c* 1.4, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{11}H_{14}O_3$

(1*R*)-1-(4-Methoxyphenyl)ethyl acetate

E.e. = 98% [by chiral HPLC]

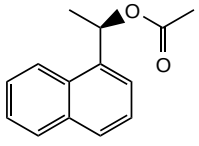
$[\alpha]_D^{25} = +134.7$ (*c* 1.4, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Ahmed Kamal,* Mahendra Sandbhor and K. Venkata Ramana

Tetrahedron: Asymmetry *13 (2002) 815*



$C_{14}H_{14}O_2$

(1*R*)-1-(1-Napthyl)ethyl acetate

E.e. >99% [by chiral HPLC]

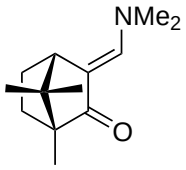
$[\alpha]_D^{25} = +52.7$ (*c* 1.4, $CHCl_3$)

Source of chirality: enzymatic acetylation

Absolute configuration: *R*

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{20} = +484.8$ (*c* 0.506, CH_2Cl_2)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

Absolute configuration: 1*R*,3*E*,4*R*

$C_{13}H_{21}NO$

(1*R*,4*R*)-3-[(*E*)-(Dimethylamino)methylidene]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

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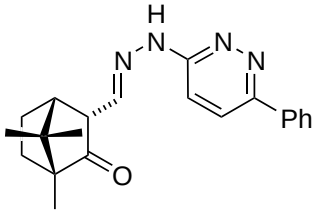
Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 78%

$[\alpha]_D^{20} = -39.3$ (*c* 0.293, CH_2Cl_2)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

Absolute configuration: 1*R*,3*R*,4*R*

$C_{21}H_{24}N_4O$

(1*R*,3*R*,4*R*)-3-[(6-Phenylpyridazin-3-yl)hydrazonomethyl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

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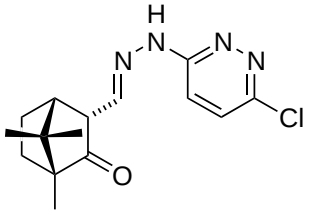
Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 22%

$[\alpha]_D^{23} = -9.3$ (*c* 0.484, CH_2Cl_2)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{19}ClN_4O$

(1*R*,3*R*,4*R*)-3-[(6-Chloropyridazin-3-yl)hydrazonomethyl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

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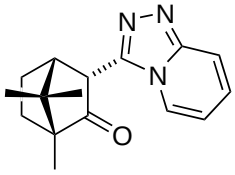
Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 98%

$[\alpha]_D^{26} = -9.5$ (*c* 0.474, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

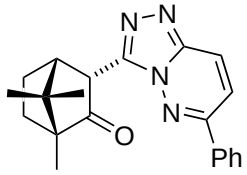
Absolute configuration: 1*R*,3*R*,4*R*

$C_{16}H_{19}N_3O$

(1*R*,3*R*,4*R*)-3-[1,2,4-Triazolo[4,3-*a*]pyridin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 92%

$[\alpha]_D^{25} = +107.5$ (*c* 0.400, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

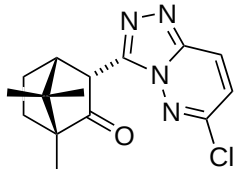
Absolute configuration: 1*R*,3*R*,4*R*

$C_{21}H_{22}N_4O$

(1*R*,3*R*,4*R*)-3-[6-Phenyl-1,2,4-triazolo[4,3-*b*]pyridazin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{25} = +97.0$ (*c* 0.400, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

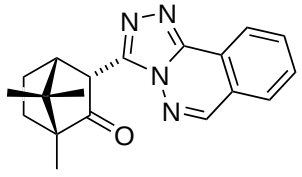
Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{17}ClN_4O$

(1*R*,3*R*,4*R*)-3-[6-Chloro-1,2,4-triazolo[4,3-*b*]pyridazin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{25} = +66.0$ (*c* 0.444, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

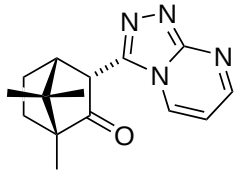
Absolute configuration: 1*R*,3*R*,4*R*

$C_{19}H_{20}N_4O$

(1*R*,3*R*,4*R*)-3-[1,2,4-Triazolo[4,3-*b*]phthalazin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{25} = -147.6$ (*c* 0.245, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

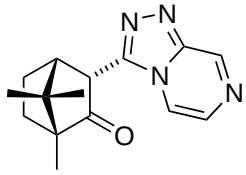
Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{18}N_4O$

(1*R*,3*R*,4*R*)-3-[1,2,4-Triazolo[4,3-*a*]pyrimidin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{25} = -83.0$ (*c* 0.336, $CHCl_3$)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

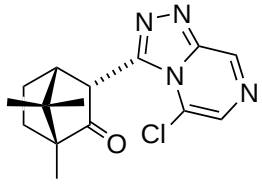
Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{18}N_4O$

(1*R*,3*R*,4*R*)-3-[1,2,4-Triazolo[4,3-*a*]pyrazin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 100%

$[\alpha]_D^{25} = +237.0$ (*c* 0.430, CH_2Cl_2)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

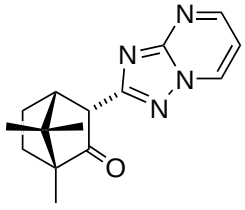
Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{17}ClN_4O$

(1*R*,3*R*,4*R*)-3-[5-Chloro-1,2,4-triazolo[4,3-*a*]pyrazin-3-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Uroš Grošelj, Simon Rečnik, Jurij Svete,* Anton Meden and Branko Stanovnik

Tetrahedron: Asymmetry *13 (2002) 821*



D.e. = 92%

$[\alpha]_D^{21} = +103.9$ (*c* 0.440, CH_2Cl_2)

Source of chirality: natural (1*R*)-(+)-camphor and stereoselective synthesis

Absolute configuration: 1*R*,3*R*,4*R*

$C_{15}H_{18}N_4O$

(1*R*,3*R*,4*R*)-3-[1,2,4-Triazolo[1,5-*a*]pyrimidin-2-yl]-1,7,7-trimethylbicyclo[2.2.1]heptan-2-one

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

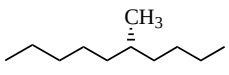
Tetrahedron: Asymmetry *13 (2002) 835*

E.e. = 64% by specific rotation value

$[\alpha]_D^{25} = -0.25$ (*c* 4.5, EtOH)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

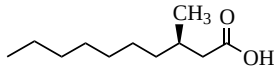


$C_{11}H_{24}$

(*R*)-5-Methyldecane

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*R*)-3-Methyldecanoic acid

E.e. = 87.3% by ^{77}Se NMR of the corresponding (*S*)-4-isopropyl-oxazolidine-2-selone amide

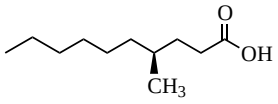
$[\alpha]_D^{25} = +4.9$ (*c* 1.42, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*S*)-4-Methyldecanoic acid

E.e. = 95.2% by ^{77}Se NMR of the corresponding (*S*)-4-isopropyl-oxazolidine-2-selone amide

$[\alpha]_D^{25} = +0.2$ (*c* 1.12, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *S*

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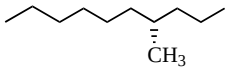
Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{24}$

(*S*)-4-Methyldecane

E.e. = 56% by specific rotation value

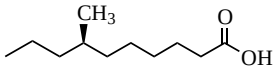
$[\alpha]_D^{25} = +0.78$ (*c* 6.46, CH_2Cl_2)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *S*

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*R*)-7-Methyldecanoic acid

E.e. = 83% by specific rotation value of the corresponding *R*-5-methyldecane

$[\alpha]_D^{25} = -1.0$ (*c* 3.84, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

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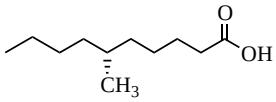
Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*R*)-6-Methyldecanoic acid

E.e. = 41.5% by ^{77}Se NMR of the corresponding (*S*)-4-isopropyl-oxazolidine-2-selone amide

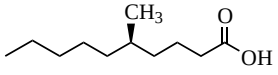
$[\alpha]_D^{25} = -0.7$ (1.26, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*R*)-5-Methyldecanoic acid

E.e. = 96.0% by ^{77}Se NMR of the corresponding (*S*)-4-isopropyl-oxazolidine-2-selone amide

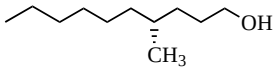
$[\alpha]_D^{25} = -0.13$ (*c* 1.51, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{24}O$

(*R*)-4-Methyl-1-decanol

E.e. = 63% by ^{77}Se NMR of the corresponding (*S*)-4-isopropyl-oxazolidine-2-selone amide

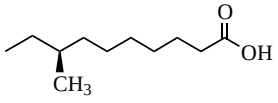
$[\alpha]_D^{25} = +0.69$ (*c* 3.5, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *R*

Erik Hedenström,* Ba-Vu Nguyen and Louis A. Silks, III

Tetrahedron: Asymmetry *13 (2002) 835*



$C_{11}H_{22}O_2$

(*S*)-8-Methyldecanoic acid

E.e. = 87% by specific rotation value

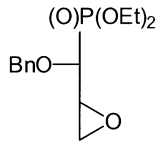
$[\alpha]_D^{25} = +6.1$ (*c* 1.14, $CHCl_3$)

Source of chirality: CRL-catalysed esterification

Absolute configuration: *S*

Andrzej E. Wróblewski* and Katarzyna B. Balcerzak

Tetrahedron: Asymmetry *13 (2002) 845*



$C_{14}H_{21}O_5P$

Diethyl (1*R*,2*R*)-1-benzyloxy-2,3-epoxypropylphosphonate

E.e. = 100%

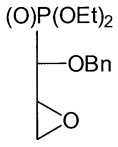
$[\alpha]_D$ = +20.7 (*c* 1.23, chloroform)

Source of chirality: D-mannitol

Absolute configuration: 1*R*,2*R*

Andrzej E. Wróblewski* and Katarzyna B. Balcerzak

Tetrahedron: Asymmetry *13 (2002) 845*



$C_{14}H_{21}O_5P$

Diethyl (1*S*,2*R*)-1-benzyloxy-2,3-epoxypropylphosphonate

E.e. = 100%

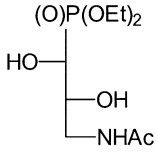
$[\alpha]_D$ = +22.1 (*c* 0.997, chloroform)

Source of chirality: D-mannitol

Absolute configuration: 1*S*,2*R*

Andrzej E. Wróblewski* and Katarzyna B. Balcerzak

Tetrahedron: Asymmetry *13 (2002) 845*



$C_9H_{20}NO_6P$

Diethyl (1*R*,2*R*)-3-acetamido-1,2-dihydroxypropylphosphonate

E.e. = 100%

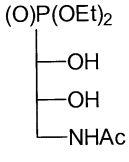
$[\alpha]_D$ = +19.0 (*c* 0.98, chloroform)

Source of chirality: D-mannitol

Absolute configuration: 1*R*,2*R*

Andrzej E. Wróblewski* and Katarzyna B. Balcerzak

Tetrahedron: Asymmetry *13 (2002) 845*



$C_9H_{20}NO_6P$

Diethyl (1*S*,2*R*)-3-acetamido-1,2-dihydroxypropylphosphonate

E.e. = 100%

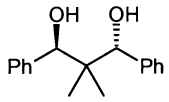
$[\alpha]_D$ = −77.2 (*c* 1.01, chloroform)

Source of chirality: D-mannitol

Absolute configuration: 1*S*,2*R*

K. C. Bhowmick, K. R. K. Prasad and N. N. Joshi*

Tetrahedron: Asymmetry *13 (2002) 851*



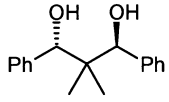
$C_{17}H_{20}O_2$

(−)-2,2-Dimethyl-1,3-diphenyl-1,3-propanediol

Ee >99% (by chiral HPLC)
$[\alpha]_D^{25} = -8.0$ ($c = 1$, $CHCl_3$)
Source of chirality: chemical resolution
Absolute configuration: *R,R*

K. C. Bhowmick, K. R. K. Prasad and N. N. Joshi*

Tetrahedron: Asymmetry *13 (2002) 851*



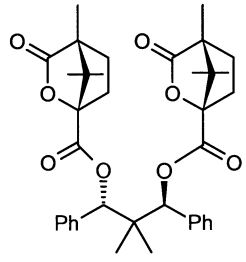
$C_{17}H_{20}O_2$

(+)-2,2-Dimethyl-1,3-diphenyl-1,3-propanediol

Ee >99% (by chiral HPLC)
$[\alpha]_D^{25} = +8.0$ ($c = 1$, $CHCl_3$)
Source of chirality: chemical resolution
Absolute configuration: *S,S*

K. C. Bhowmick, K. R. K. Prasad and N. N. Joshi*

Tetrahedron: Asymmetry *13 (2002) 851*



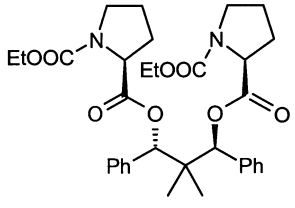
$C_{37}H_{44}O_8$

(+)-2,2-Dimethyl-1,3-diphenylpropyl-1,3-bis(camphanate)

De >99% (by NMR)
$[\alpha]_D^{25} = +1.6$ ($c = 1$, $CHCl_3$)
Source of chirality: synthesis

K. C. Bhowmick, K. R. K. Prasad and N. N. Joshi*

Tetrahedron: Asymmetry *13 (2002) 851*



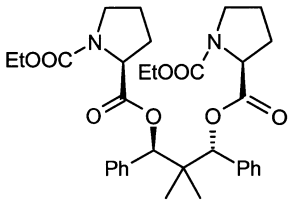
$C_{33}H_{42}N_2O_8$

(+)-2,2-Dimethyl-1,3-diphenylpropyl-1,3-bis(*N*-carbethoxyprolinate)

De >99% (by NMR)
$[\alpha]_D^{25} = +15.1$ ($c = 1$, $CHCl_3$)
Source of chirality: synthesis

K. C. Bhowmick, K. R. K. Prasad and N. N. Joshi*

Tetrahedron: Asymmetry *13 (2002) 851*

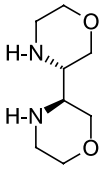


De >99% (by NMR)
$[\alpha]_D^{25} = -84.3$ ($c = 1$, $CHCl_3$)
Source of chirality: synthesis

$C_{33}H_{42}N_2O_8$
(−)-2,2-Dimethyl-1,3-diphenylpropyl-1,3-bis(*N*-carbethoxyprolinate)

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

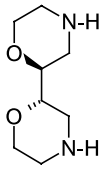


E.e. >98%
$[\alpha]_D^{20} = -29.4$ (c 2.0, MeOH)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 3*S*,3′*S*

$C_8H_{16}N_2O_2$
(3*S*,3′*S*)-Bimorpholine

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

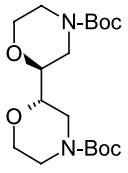


E.e. >98%
$[\alpha]_D^{20} = +18.0$ (c 4.89, MeOH)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 2*S*,2′*S*

$C_8H_{16}N_2O_2$
(2*S*,2′*S*)-Bimorpholine

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

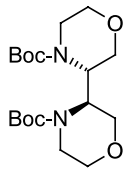


E.e. >98%
$[\alpha]_D^{21} = +15.3$ (c 1.78, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 2*S*,2′*S*

$C_{18}H_{32}N_2O_6$
(2*S*,2′*S*)-*N*,*N*′-Di-(*tert*-butoxycarbonyl)bimorpholine

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

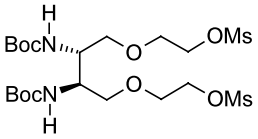


E.e. >98%
$[\alpha]_D^{20} = +86.2$ (*c* 5.33, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 3*S*,3′*S*

$C_{18}H_{32}N_2O_6$
(3*S*,3′*S*)-*N*,*N*′-Di-(*tert*-butoxycarbonyl)bimorpholine

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*



$[\alpha]_D^{21} = -7.7$ (*c* 3.78, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 5*S*,6*S*

$C_{20}H_{40}N_2O_{12}S_2$
(5*S*,6*S*)-5,6-Bis-(*N*-*tert*-butoxycarbonyl)amino-3,6-dioxadecane 1,10-dimethanesulfonate

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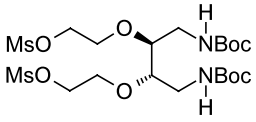
Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*



$[\alpha]_D^{19} = -8.5$ (*c* 2.67, MeOH)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 4*S*,5*S*

$C_{20}H_{40}N_2O_{12}S_2$
(4*S*,5*S*)-4,5-Bis-(*N*-*tert*-butoxycarbonyl)aminomethyl-3,6-dioxaoctane-1,8-dimethanesulfonate

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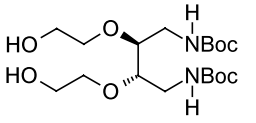
Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*



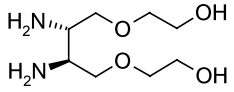
$[\alpha]_D^{19} = -12.1$ (*c* 2.22, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 2*S*,3*S*

$C_{18}H_{36}N_2O_8$
(2*S*,3*S*)-Di-*tert*-butyl-2,3-bis[(2′-hydroxy)ethoxy]-1,4-butanedicarbamate

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{20} = +11.6$ (*c* 3.78, MeOH)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 5*S*,6*S*

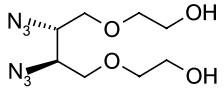


$C_8H_{20}N_2O_4$
(5*S*,6*S*)-5,6-Diamino-3,8-dioxadecane-1,10-diol

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{20} = -38.4$ (*c* 4.44, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 5*S*,6*S*

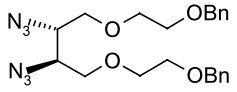


$C_8H_{16}N_6O_4$
(5*S*,6*S*)-5,6-Diazido-3,8-dioxadecane-1,10-diol

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{19} = -26.0$ (*c* 5.67, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 1*S*,2*S*



$C_{22}H_{28}N_6O_4$
(1*S*,2*S*)-1,2-Diazido-1,2-bis-[(2′-benzyloxy)ethoxymethyl]ethane

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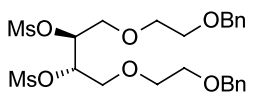
Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{18} = -14.6$ (*c* 9.56, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 1*S*,2*S*

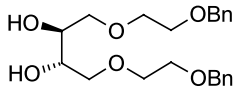


$C_{24}H_{34}O_{10}S_2$
(1*S*,2*S*)-1,2-Bis-[(2′-benzyloxy)ethoxymethyl]ethane 1,2-dimethanesulfonate

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{18} = -2.0$ (*c* 9.78, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 2*S*,3*S*3

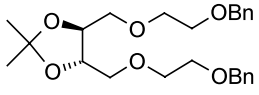


$C_{22}H_{30}O_6$
(2*S*,3*S*)-1,4-Bis-[(2′-benzyloxy)ethoxy]butane-2,3-diol

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{19} = -3.7$ (*c* 6.33, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 4*S*,5*S*



$C_{25}H_{34}O_6$
(4*S*,5*S*)-4,5-Bis-[(2′-benzyloxy)ethoxymethyl]-2,2-dimethyl-1,3-dioxolane

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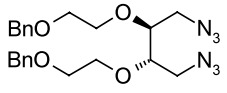
Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

$[\alpha]_D^{21} = +7.6$ (*c* 2.73, CH_2Cl_2)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 2*S*,3*S*

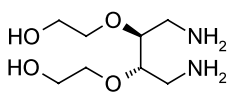


$C_{22}H_{28}N_6O_4$
(2*S*,3*S*)-2,3-Bis[(2′-benzyloxy)ethoxy]-1,4-diazidobutane

Tõnis Kanger,* Kadri Kriis, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp

Tetrahedron: Asymmetry *13 (2002) 857*

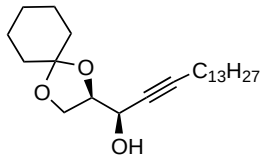
$[\alpha]_D^{19} = -35.3$ (*c* 1.89, MeOH)
Source of chirality: (*R*,*R*)-diethyl tartrate
Absolute configuration: 4*S*,5*S*



$C_8H_{20}N_2O_4$
(4*S*,5*S*)-4,5-Diaminomethyl-3,6-dioxa-1,8-octanediol

Federica Compostella, Laura Franchini,
Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi
and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*



$C_{24}H_{42}O_3$

(2*R*,3*R*)-1,2-*O*-Cyclohexylidene-4-octadecyn-1,2,3-triol

D.e. >95%
$[\alpha]_D = +16.9$ (*c* 1, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*R*

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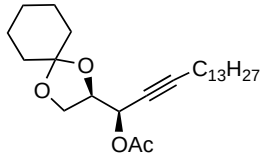
Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi
and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*



$C_{26}H_{44}O_4$

(2*R*,3*R*)-3-*O*-Acetyl-1,2-*O*-cyclohexylidene-4-octadecyn-1,2,3-triol

D.e. >95%
$[\alpha]_D = -25.8$ (*c* 1, $CHCl_3$)
Source of chirality: Mitsunobu inversion
Absolute configuration: 2*R*,3*R*

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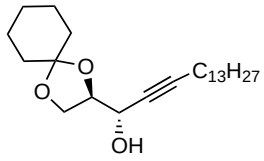
Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi
and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*



$C_{24}H_{42}O_3$

(2*R*,3*S*)-1,2-*O*-Cyclohexylidene-4-octadecyn-1,2,3-triol

D.e. >95%
$[\alpha]_D = +20.0$ (*c* 1, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*S*

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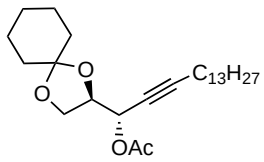
Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi
and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*



$C_{26}H_{44}O_4$

(2*R*,3*S*)-3-*O*-Acetyl-1,2-*O*-cyclohexylidene-4-octadecyn-1,2,3-triol

D.e. >95%
$[\alpha]_D = +57.5$ (*c* 0.68, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*S*

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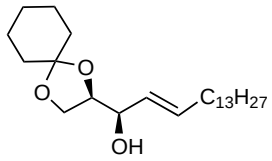
Tetrahedron: Asymmetry *13 (2002) 867*

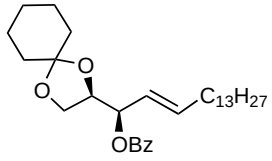


D.e. >95%
$[\alpha]_D = -1.0$ (*c* 1, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*R*

$C_{24}H_{44}O_3$
(2*R*,3*R*,4*E*)-1,2-*O*-Cyclohexylidene-4-octadecen-1,2,3-triol

Federica Compostella, Laura Franchini, Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*

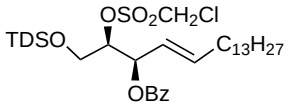


D.e. >95%
$[\alpha]_D = +16.7$ (*c* 1, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*R*

$C_{31}H_{48}O_4$
(2*R*,3*R*,4*E*)-3-*O*-Benzoyl-1,2-*O*-cyclohexylidene-4-octadecen-1,2,3-triol

Federica Compostella, Laura Franchini, Giovanni Battista Giovenzana, Luigi Panza,* Davide Prosperi and Fiamma Ronchetti

Tetrahedron: Asymmetry *13 (2002) 867*

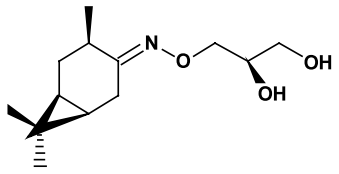


D.e. >95%
$[\alpha]_D = -1.6$ (*c* 1, $CHCl_3$)
Source of chirality: enzymatic acylation
Absolute configuration: 2*R*,3*R*

$C_{34}H_{59}ClO_6SSi$
(2*R*,3*R*,4*E*)-3-*O*-Benzoyl-2-*O*-chloromethylsulfonyl-1-*O*-thexyldimethylsilyl-4-octadecen-1,2,3-triol

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*

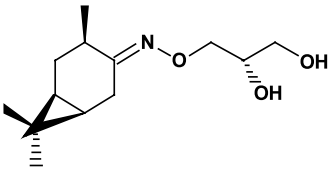


E.e. >97%
$[\alpha]_D^{20} = -50.7$ (*c* = 2.5, $CHCl_3$)
Source of chirality: hydrolytic kinetic resolution
Absolute configuration: 1*S*,3*R*,6*R*,2′*R*

$C_{13}H_{23}NO_3$
(1*S*,3*R*,6*R*,2′*R*)-(−)-4-[(2′,3′-Dihydroxy)propoxyimino]-*cis*-carane

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*



$C_{13}H_{23}NO_3$

(1*S*,3*R*,6*R*,2′*S*)-(−)-4-[(2′,3′-Dihydroxy)propoxyimino]-*cis*-carane

E.e. >97%

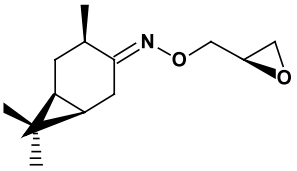
$[\alpha]_D^{20} = -28.3$ ($c = 2.0$, $CHCl_3$)

Source of chirality: hydrolytic kinetic resolution

Absolute configuration: 1*S*,3*R*,6*R*,2′*S*

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*



$C_{13}H_{21}NO_2$

(1*S*,3*R*,6*R*,2′*R*)-(−)-4-[(2′,3′-Epoxy)propoxyimino]-*cis*-carane

E.e. >99%

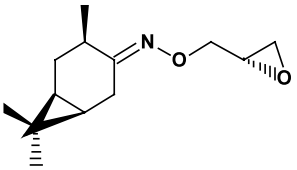
$[\alpha]_D^{25} = -34.6$ ($c = 2.0$, $CHCl_3$)

Source of chirality: hydrolytic kinetic resolution

Absolute configuration: 1*S*,3*R*,6*R*,2′*R*

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*



$C_{13}H_{21}NO_2$

(1*S*,3*R*,6*R*,2′*S*)-(−)-4-[(2′,3′-Epoxy)propoxyimino]-*cis*-carane

E.e. >97%

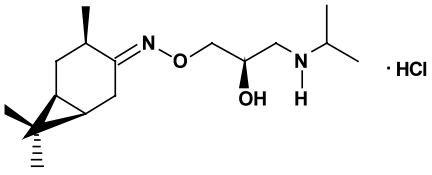
$[\alpha]_D^{25} = -53.6$ ($c = 2.0$, $CHCl_3$)

Source of chirality: hydrolytic kinetic resolution or Mitsunobu reaction

Absolute configuration: 1*S*,3*R*,6*R*,2′*S*

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*



$C_{16}H_{30}N_2O_2 \cdot HCl$

(1*S*,3*R*,6*R*,2′*R*)-(−)-4-[2′-Hydroxy-3′-(*N*-isopropylamino)propoxyimino]-*cis*-carane hydrochloride

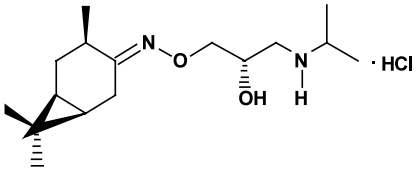
$[\alpha]_D^{25} = -33.7$ ($c = 5.0$, EtOH)

Source of chirality: hydrolytic kinetic resolution

Absolute configuration: 1*S*,3*R*,6*R*,2′*R*

Stanisław Lochyński,* Bożena Frąckowiak, Tadeusz Librowski, Ryszard Czarnecki, Jacek Grochowski, Paweł Serda and Marta Pasenkiewicz-Gierula

Tetrahedron: Asymmetry *13 (2002) 873*

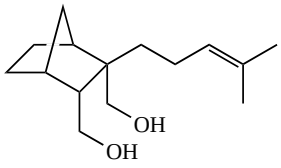


$[\alpha]_D^{25} = -7.2$ ($c = 5.0$, EtOH)
Source of chirality: hydrolytic kinetic resolution
Absolute configuration: 1*S*,3*R*,6*R*,2′*S*

$C_{16}H_{30}N_2O_2 \cdot HCl$
(1*S*,3*R*,6*R*,2′*S*)-(−)-4-[2′-Hydroxy-3′-(*N*-isopropylamino)propoxyimino]-*cis*-carane hydrochloride

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*

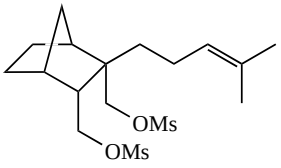


E.e. >96%
$[\alpha]_D^{25} = +26$ ($c = 1.18$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*S*,3*R*)

$C_{15}H_{26}O_2$
(1*S*,2*S*,3*R*)-(4-Methyl-3-pentenyl)-2,3-bis(hydroxymethyl)bicyclo[2.2.1]heptane

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*

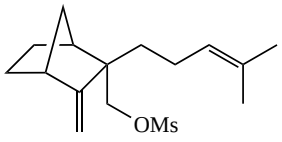


E.e. >96%
$[\alpha]_D^{25} = -13$ ($c = 2.18$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (1*S*,2*S*,3*R*)

$C_{17}H_{30}O_6S_2$
(1*S*,2*S*,3*R*)-2-(4-Methyl-3-pentenyl)bicyclo[2.2.1]heptane-2,3-bis(methylmethane sulfonate)

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*

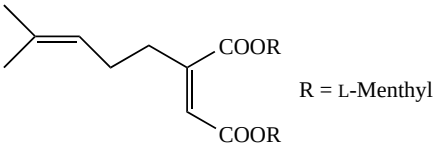


E.e. >96%
$[\alpha]_D^{25} = -64$ ($c = 1.35$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*S*,2*S*

$C_{16}H_{26}O_3S$
(1*S*,2*S*)-3-Methylidene-2-(4-methyl-3-pentenyl)bicyclo[2.2.1]heptane-2-methyl methanesulfonate

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*



R = L-Menthyl

E.e. >99%

$[\alpha]_D^{25} = -94$ ($c = 1.19$, $CHCl_3$)

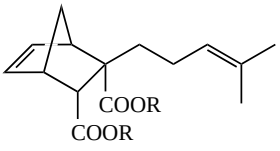
Source of chirality: (−)-menthol

$C_{30}H_{50}O_4$

Bis-[(1*R*,2*S*,5*R*)-2-isopropyl-5-methylcyclohexyl] 2-(4-methyl-3-pentenyl)maleate

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*



R = L-Menthyl

D.e. >96%

$[\alpha]_D^{25} = -114$ ($c = 1.15$, $CHCl_3$)

Source of chirality: (−)-menthol

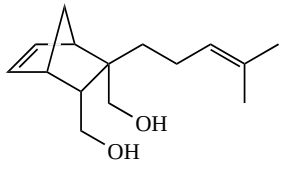
Absolute configuration: (1*S*,2*S*,3*R*)

$C_{35}H_{56}O_4$

Bis-[(1*R*,2*S*,5*R*)-2-isopropyl-5-methylcyclohexyl] (1*S*,2*S*,3*R*)-2-(4-methyl-3-pentenyl)bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate

Nicolas Baldovini and Guy Solladié*

Tetrahedron: Asymmetry *13 (2002) 885*



E.e. >96%

$[\alpha]_D^{25} = +22$ ($c = 1.12$, $CHCl_3$)

Source of chirality: asymmetric synthesis

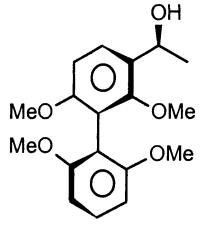
Absolute configuration: (1*S*,2*S*,3*R*)

$C_{15}H_{24}O_2$

(1*S*,2*S*,3*R*)-(4-Methyl-3-pentenyl)-2,3-bis(hydroxymethyl)bicyclo[2.2.1]hept-5-ene

Giovanna Delogu,* Davide Fabbri, Cristina de Candia, Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry *13 (2002) 891*



E.e. = 95% (by ^1H NMR spectrum in the presence of $Eu(hfc)_3$ of the corresponding acetate)

$[\alpha]_D = -13.7$ (c 0.96, $CHCl_3$)

Source of chirality: (*R*)-CBS-Me-catalysed asymmetric reduction

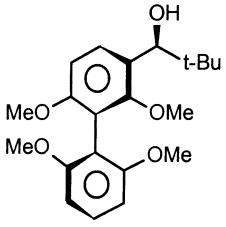
Absolute configuration: *S*

$C_{18}H_{22}O_5$

(1*S*)-1-(2,2′,6,6′-Tetramethoxy-1,1′-biphenyl-3-yl)ethanol

Giovanna Delogu,* Davide Fabbri, Cristina de Candia, Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry *13 (2002) 891*



$C_{21}H_{28}O_5$

(1*S*)-2,2′-Dimethyl-1-(2,2′,6,6′-tetramethoxy-1,1′-biphenyl-3-yl)propan-1-ol

E.e. = 93% (by chiral HPLC)

$[\alpha]_D = -18.4$ (*c* 1.68, $CHCl_3$)

Source of chirality: (*R*)-CBS-Me-catalysed asymmetric reduction

Absolute configuration: *S*

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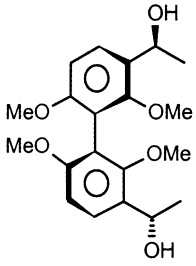
Tetrahedron: Asymmetry *13 (2002) 891*



$C_{20}H_{26}O_6$

(a*R*,1*S*,1′*S*)-1,1′-(2,2′,6,6′-Tetramethoxy-1,1′-biphenyl-3,3′-diyl) diethanol

E.e. = 95% (by chiral HPLC)

$[\alpha]_D = -14.8$ (*c* 0.75, $CHCl_3$)

Source of chirality: (*R*)-CBS-Me-catalysed asymmetric reduction

Absolute configuration: a*R*,*S*,*S*

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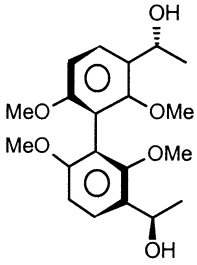
Tetrahedron: Asymmetry *13 (2002) 891*



$C_{20}H_{26}O_6$

(a*S*,1*S*,1′*S*)-1,1′-(2,2′,6,6′-Tetramethoxy-1,1′-biphenyl-3,3′-diyl) diethanol

E.e. >98% (by chiral HPLC)

$[\alpha]_D = -23.4$ (*c* 0.43, $CHCl_3$)

Source of chirality: (*R*)-CBS-Me-catalysed asymmetric reduction

Absolute configuration: a*S*,*S*,*S*

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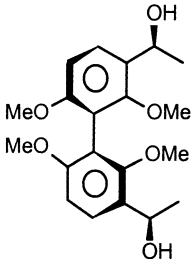
Tetrahedron: Asymmetry *13 (2002) 891*



$C_{20}H_{26}O_6$

(a*S*,1*R*,1′*S*)-1,1′-(2,2′,6,6′-Tetramethoxy-1,1′-biphenyl-3,3′-diyl) diethanol

E.e. = 80% (by chiral HPLC)

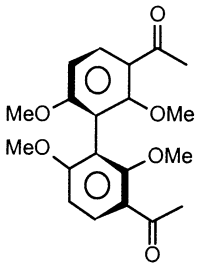
$[\alpha]_D = -5.2$ (*c* 0.25, $CHCl_3$)

Source of chirality: (*R*)-CBS-Me-catalysed asymmetric reduction

Absolute configuration: a*S*,*R*,*S*

Giovanna Delogu,* Davide Fabbri, Cristina de Candia, Angela Patti* and Sonia Pedotti

Tetrahedron: Asymmetry *13 (2002) 891*



$C_{20}H_{22}O_6$

(a*S*)-1,1′-(2,2′,6,6′-Tetramethoxy-1,1′-biphenyl-3,3′-diyl)diethanone

E.e. >98% (by chiral HPLC)

$[\alpha]_D = +35.6$ (*c* 0.72, C_6H_6)

Source of chirality: oxidation of (a*S*,1*S*,1′*S*)-1,1′-(2,2′,6,6′-tetramethoxy-1,1′-biphenyl-3,3′-diyl)diethanol

Absolute configuration: a*S*

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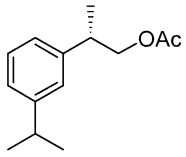
Tetrahedron: Asymmetry *13 (2002) 899*



$C_{14}H_{20}O_2$

(−)-2-(3-Isopropylphenyl)propanol acetate

E.e. >99%

$[\alpha]_D^{20} = -10.8$ (*c* 1.09, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: 2*S*

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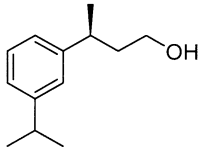
Tetrahedron: Asymmetry *13 (2002) 899*



$C_{13}H_{20}O$

(+)-3-(3-Isopropylphenyl)butanol

E.e. =97%

$[\alpha]_D^{20} = +16.6$ (*c* 1.25, $CHCl_3$)

Source of chirality: enzymatic synthesis

Absolute configuration: 3*S*

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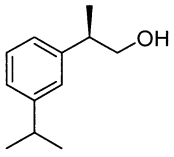
Tetrahedron: Asymmetry *13 (2002) 899*



$C_{12}H_{18}O$

(+)-2-(3-Isopropylphenyl)propanol

E.e. >99%

$[\alpha]_D^{20} = +10.8$ (*c* 1.54, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: 2*R*

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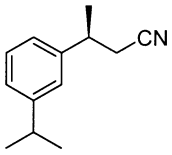
Tetrahedron: Asymmetry *13 (2002) 899*



$C_{13}H_{17}N$

(−)-3-(3-Isopropylphenyl)butyronitrile

E.e. >99%

$[\alpha]_D^{20} = -2.9$ (*c* 1.7, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: 3*S*

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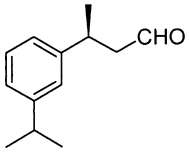
Tetrahedron: Asymmetry *13 (2002) 899*



$C_{13}H_{18}O$

(+)-Florhydral®(+)-3-(3-Isopropylphenyl)butanal

E.e. >99%

$[\alpha]_D^{20} = +30.7$ (*c* 1.39, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: 3*S*