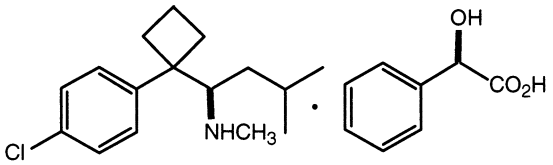
Tetrahedron: Asymmetry *13 (2002) 107*

Zhengxu Han, Dhileepkumar Krishnamurthy,* Derek Pflum, Qun K. Fang, Hal Butler, T. Stanley Cameron, Stephen A. Wald and Chris H. Senanayake*

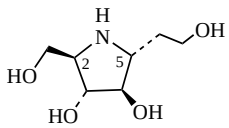


(*R*)-Desmethylsibutramine (*R*)-mandelate salt

E.e. >99%
$[\alpha]_D^{20} = +5.3$ (*c* 5.8, CH_3OH)
Source of chirality: acid resolution
Absolute configuration: *R*

Tetrahedron: Asymmetry *13 (2002) 111*

Jean-Bernard Behr and Georges Guillerm*

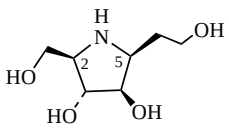


$C_7H_{15}NO_4$
2,5-Imino-2,5,6-trideoxy-D-*manno*-heptitol

$[\alpha]_D^{20} = +46.0$ (*c* = 1.15, H_2O)
Source of chirality: L-xylose
Absolute configuration: 2*R*,3*R*,4*R*,5*R*

Tetrahedron: Asymmetry *13 (2002) 111*

Jean-Bernard Behr and Georges Guillerm*

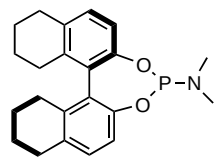


$C_7H_{15}NO_4$
2,5-Imino-2,5,6-trideoxy-L-*gulo*-heptitol

$[\alpha]_D^{20} = +37.9$ (*c* = 1.8, H_2O)
Source of chirality: L-xylose
Absolute configuration: 2*R*,3*R*,4*R*,5*S*

Tetrahedron: Asymmetry *13 (2002) 115*

Qingle Zeng, Hui Liu, Xin Cui, Aiqiao Mi, Yaozhong Jiang,* Xingshu Li, Michael C. K. Choi and Albert S. C. Chan



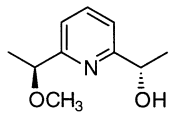
$C_{22}H_{26}NO_2P$
N,*N*-Dimethyl (*R*)-5,5′6,6′,7,7′,8,8′-octahydro-1,1′-bi-2-naphthyl phosphoramidite

E.e. >99%
$[\alpha]_D^{32} = -310$ (*c* 0.610, THF)
Source of chirality: asymmetric synthesis
Absolute configuration: *R*

David Le Goanvic, Michel Holler and Patrick Pale*

Tetrahedron: Asymmetry *13 (2002) 119*

$[\alpha]_D = -106.7$ ($c = 0.97$, $CHCl_3$)
Source of chirality: baker's yeast reduction
Absolute configuration: 1*S*,1*S*′

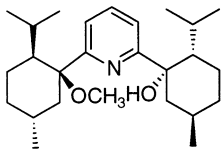


$C_{10}H_{15}NO_2$
(1*S*,1*S*′)-1-[6-(1-Methoxyethyl)pyridin-2-yl]ethanol

David Le Goanvic, Michel Holler and Patrick Pale*

Tetrahedron: Asymmetry *13 (2002) 119*

$[\alpha]_D = -50.5$ ($c = 0.70$, $CHCl_3$)
Source of chirality: (−)-menthone
Absolute configuration: 1*S*,2*S*,5*R*,1*S*′,2*S*′,5*R*′

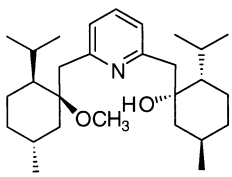


$C_{26}H_{43}NO_2$
(1*S*,2*S*,5*R*,1*S*′,2′,5*R*′)-2-Isopropyl-1-[6-(2-isopropyl-1-methoxy-5-methylcyclohexyl)pyridin-2-yl]-5-methylcyclohexanol

David Le Goanvic, Michel Holler and Patrick Pale*

Tetrahedron: Asymmetry *13 (2002) 119*

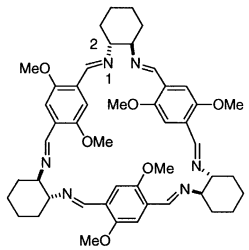
$[\alpha]_D = -148$ ($c = 1.63$, $CHCl_3$)
Source of chirality: (−)-menthone
Absolute configuration: 1*S*,2*S*,5*R*,1*S*′,2*S*′,5*R*′



$C_{28}H_{47}NO_2$
(1*S*,2*S*,5*R*,1*S*′,2*S*′,5*R*′)-2-Isopropyl-1-[6-(2-isopropyl-1-methoxy-5-methylcyclohexylmethyl)pyridin-2-ylmethyl]-5-methylcyclohexanol

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*

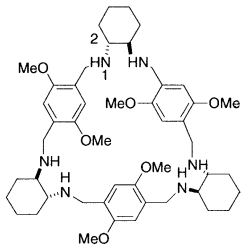


E.e. >98%
$[\alpha]_D^{25} = +442.4$ (c 0.2, CH_2Cl_2)
Source of chirality: chemical resolution via tartrate salt
Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

$C_{48}H_{60}N_6O_6$
(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:12,13:22,23)-tributano-(7,8′,17,18′,27,28′)-hexamethoxy-(6,9:16,19:26,29)-trietheno-(2*H*,3*H*,12*H*,13*H*,22*H*,23*H*)-hexahydro-(30)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



$C_{48}H_{72}N_6O_6$

E.e. >98%

$[\alpha]_D^{25} = -219.8$ (c 0.2, CH_2Cl_2)

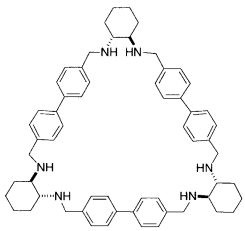
Source of chirality: chemical resolution via tartrate salt

Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:12,13:22,23)-tributano-(7,8′,17,18′,27,28′)-hexamethoxy-(6,9:16,19:26,29)-trietheno-(1*H*,2*H*,3*H*,4*H*,5*H*,10*H*,11*H*,12*H*,13*H*,14*H*,20*H*,21*H*,22*H*,23*H*,24*H*,25*H*)-duodecahydro-(30)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



$C_{60}H_{72}N_6$

E.e. >98%

$[\alpha]_D^{25} = -227.3$ (c 0.2, CH_2Cl_2)

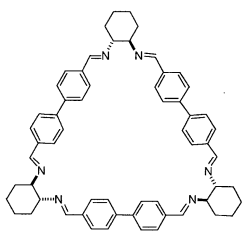
Source of chirality: chemical resolution via tartrate salt

Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:16,17:30,31)-tributano-(6,9:10,13:20,23:24,27:34,37:38,41)-hexaetheno-(1*H*,2*H*,3*H*,4*H*,5*H*,14*H*,15*H*,16*H*,17*H*,18*H*,19*H*,28*H*,29*H*,30*H*,31*H*,32*H*,33*H*,42*H*)-duodecahydro-(42)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



$C_{60}H_{60}N_6$

E.e. >98%

$[\alpha]_D^{25} = +250$ (c 0.2, $CHCl_3$)

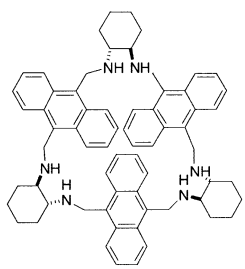
Source of chirality: chemical resolution via tartrate salt

Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:16,17:30,31)-tributano-(6,9:10,13:20,23:24,27:34,37:38,41)-hexaetheno-(2*H*,3*H*,16*H*,17*H*,30*H*,31*H*)-hexahydro-(42)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



$C_{66}H_{72}N_6$

E.e. >98%

$[\alpha]_D^{25} = +212.6$ (c 0.2, CH_2Cl_2)

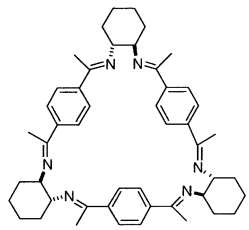
Source of chirality: chemical resolution via tartrate salt

Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:12,13:22,23)-tributano-(6,9:16,19:26,29)-tribenzo-(6′,9′:16′,19′:26′,29′)-tributadieno-(1*H*,2*H*,3*H*,4*H*,5*H*,10*H*,11*H*,12*H*,13*H*,14*H*,20*H*,21*H*,22*H*,23*H*,24*H*,25*H*)-duodecahydro-(30)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



E.e. >98%

$[\alpha]_D^{20} = -190$ (c 0.2, $CHCl_3$)

Source of chirality: chemical resolution via tartrate salt

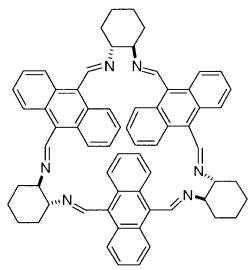
Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

$C_{48}H_{60}N_6$

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(5,10,15,20,25,30)-hexamethyl-(2,3:12,13:22,23)-tributano-(6,9:16,19:26,29)-trietheno-(2*H*,3*H*,12*H*,13*H*,22*H*,23*H*)-hexahydro-(30)-annulene

Nikolai Kuhnert,* Christian Straßnig and Ana M. Lopez-Periago

Tetrahedron: Asymmetry *13 (2002) 123*



E.e. >98%

$[\alpha]_D^{25} = -242$ (c 0.2, CH_2Cl_2)

Source of chirality: chemical resolution via tartrate salt

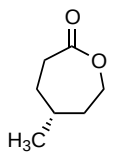
Absolute configuration: 2*R*,3*R*,16*R*,17*R*,30*R*,31*R*

$C_{66}H_{60}N_6$

(2*R*,3*R*,16*R*,17*R*,30*R*,31*R*)-1,4,15,18,29,32-Hexaaza-(2,3:12,13:22,23)-tributano-(6,9:16,19:26,29)-tribenzo-(6′,9′:16′,19′:26′,29′)-tributadieno (2*H*,3*H*,12*H*,13*H*,22*H*,23*H*)-hexahydro-(30)-annulene

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht*

Tetrahedron: Asymmetry *13 (2002) 129*



E.e. >97%

$[\alpha]_D^{23} = +40$ (c 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

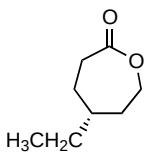
Absolute configuration: *R*

$C_7H_{12}O_2$

(*R*)-(+)-4-Methyl-ε-caprolactone

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht*

Tetrahedron: Asymmetry *13 (2002) 129*



E.e. >99%

$[\alpha]_D^{23} = +42$ (c 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

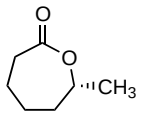
Absolute configuration: *R*

$C_8H_{14}O_2$

(*R*)-(+)-4-Ethyl-ε-caprolactone

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht*

Tetrahedron: Asymmetry *13 (2002) 129*



$C_7H_{12}O_2$

(*R*)-(+)-6-Methyl-ε-caprolactone

E.e. >99%

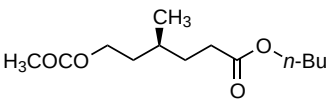
$[\alpha]_D^{23} = +18$ (*c* 0.5, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht*

Tetrahedron: Asymmetry *13 (2002) 129*



$C_{13}H_{24}O_4$

(*S*)-*n*-Butyl 6-acetoxy-4-methylhexanoate

E.e. >99%

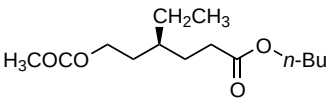
$[\alpha]_D^{23} = -2.2$ (*c* 1, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Leelakrishna Kondaveti, Talal F. Al-Azemi and Kirpal S. Bisht*

Tetrahedron: Asymmetry *13 (2002) 129*



$C_{14}H_{26}O_4$

(*S*)-*n*-Butyl 6-acetoxy-4-ethylhexanoate

E.e. >99%

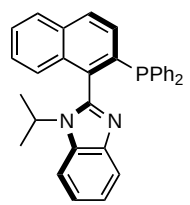
$[\alpha]_D^{23} = -0.7$ (*c* 0.7, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Axel Figge, Hans J. Altenbach,* David J. Brauer and Patrick Tielmann

Tetrahedron: Asymmetry *13 (2002) 137*



$C_{32}H_{27}N_2P$

(S_a)-2-(2-Diphenylphosphinylnaphthalen-1-yl)isopropyl-1*H*-benzimidazole

E.e. = 95%

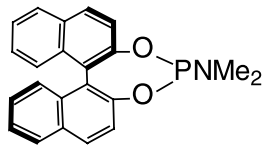
$[\alpha]_D^{20}$ −75 (*c* = 0.5, CH_2Cl_2)

Source of chirality: Fractional crystallisation of diastereomers

Absolute configuration: S_a

Zhaoming Li, Zhenghong Zhou, Lixin Wang, Qilin Zhou and Chuchi Tang*

Tetrahedron: Asymmetry *13 (2002) 145*

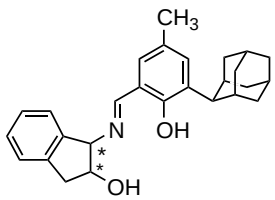


N,*N*-Dimethyl 1,1′-binaphthyl-2,2′-cyclic phosphoramidite

E.e. = >99%
$[\alpha]_D^{20} = -565$ (*c* 0.5, $CHCl_3$)
Source of chirality: (−)-(*R*)-binaphthol
Absolute configuration: *R*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*

Tetrahedron: Asymmetry *13 (2002) 149*

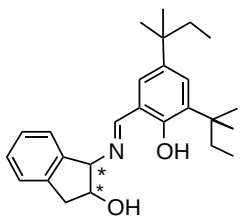


$C_{27}H_{31}NO_2$
(1*R*,2*S*)-(+)-1-[*N*-(3′-Adamantyl-5′-methylsalicylidene)amino]-2-indanol

E.e. = 100%
$[\alpha]_D^{25} = +76.9$
Source of chirality: chiral starting material
Absolute configuration: *R*,*S*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*

Tetrahedron: Asymmetry *13 (2002) 149*

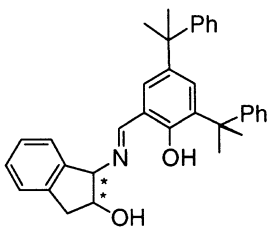


$C_{26}H_{35}NO_2$
(1*R*,2*S*)-(−)-1-[*N*-(3′,5′-Di-*tert*-amylsalicylidene)amino]-2-indanol

E.e. = 100%
$[\alpha]_D^{25} = -21.8$
Source of chirality: chiral starting material
Absolute configuration: *R*,*S*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*

Tetrahedron: Asymmetry *13 (2002) 149*

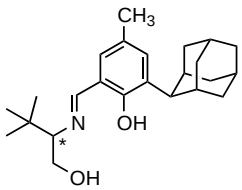


$C_{24}H_{35}NO_2$
(1*R*,2*S*)-(−)-1-[*N*-(3′,5′-Bis(α,α-dimethylbenzylsalicylidene)amino]-2-indanol

E.e. = 100%
$[\alpha]_D^{25} = -42.4$
Source of chirality: chiral starting material
Absolute configuration: 1*R*,2*S*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{24}H_{35}NO_2$

(*S*)-(+)-2-[*N*-(3′-Adamantyl-5′-methylsalicylidene)amino]-3,3-dimethyl-1-butanol

E.e. = 100%

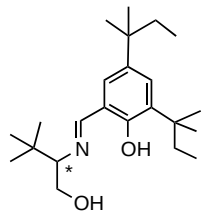
$[\alpha]_D^{25} = +0.5$

Source of chirality: chiral starting material

Absolute configuration: *S*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{23}H_{39}NO_2$

(*S*)-(−)-2-[*N*-(3′,5′-di-*tert*-Amylsalicylidene)amino]-3,3-dimethyl-1-butanol

E.e. = 100%

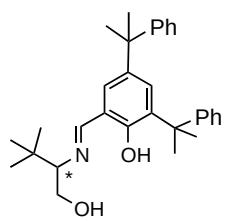
$[\alpha]_D^{25} = -33.7$

Source of chirality: chiral starting material

Absolute configuration: *S*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{31}H_{39}NO_2$

(*S*)-(−)-2-[*N*-(3′,5′-Bis(α,α-dimethylbenzylsalicylidene)amino]-3,3-dimethyl-1-butanol

E.e. = 100%

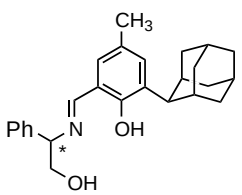
$[\alpha]_D^{25} = -34.75$

Source of chirality: chiral starting material

Absolute configuration: *S*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{26}H_{31}NO_2$

(*R*)-(+)-2-[*N*-(3′-Adamantyl-5′-methylsalicylidene)amino]-2-phenyl-1-ethanol

E.e. = 99%

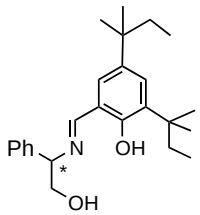
$[\alpha]_D^{25} = +126.5$

Source of chirality: chiral starting material

Absolute configuration: *R*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{25}H_{35}NO_2$

(*R*)-(+)-2-[*N*-(3′,5′-di-*tert*-Amylsalicylidene)amino]-2-phenyl-1-ethanol

E.e. = 99%

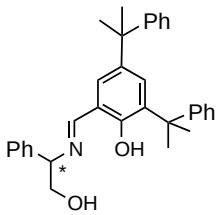
$[\alpha]_D^{25} = +95.4$

Source of chirality: chiral starting material

Absolute configuration: *R*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{33}H_{35}NO_2$

(*R*)-(+)-2-[*N*-(3′,5′-Bis(α,α-dimethylbenzyl)salicylidene)amino]-2-phenyl-1-ethanol

E.e. = 99%

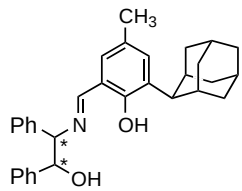
$[\alpha]_D^{25} = +80.0$

Source of chirality: chiral starting material

Absolute configuration: *R*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{32}H_{35}NO_2$

(1*S*,2*R*)-(+)-2-[*N*-3′-Adamantyl-5′-methylsalicylidene)amino]-1,2-diphenylethanol

E.e. = 100%

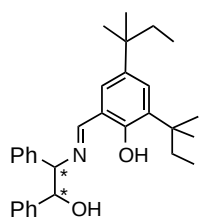
$[\alpha]_D^{25} = +0.75$

Source of chirality: chiral starting material

Absolute configuration: *R*

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{31}H_{39}NO_2$

(1*S*,2*R*)-(−)-2-[*N*-3′,5′-Di-*tert*-amylsalicylidene)amino]-1,2-diphenylethanol

E.e. = 100%

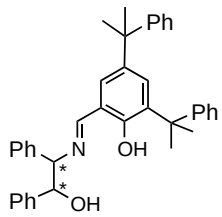
$[\alpha]_D^{25} = -18.6$

Source of chirality: chiral starting material

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

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{39}H_{39}NO_2$

(1*S*,2*R*)-(−)-2-[*N*-3′,5′-Bis(α,α-dimethylbenzyl)salicylidene)amino]-1,2-diphenylethanol

E.e. = 100%

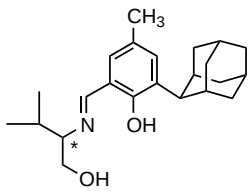
$[\alpha]_D^{25} = -7.3$

Source of chirality: chiral starting material

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

Tetrahedron: Asymmetry *13 (2002) 149*

Angeles Gama, Lucía Z. Flores-López, Gerardo Aguirre, Miguel Parra-Hake, Ratnasamy Somanathan* and Patrick J. Walsh*



$C_{23}H_{33}NO_2$

S-(−)-2-[*N*-3′-Adamantyl-5′-methylsalicylidene)amino]-3-methyl-1-butanol

E.e. = 100%

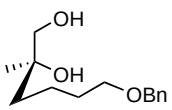
$[\alpha]_D^{25} = -26.3$

Source of chirality: chiral starting material

Absolute configuration: *S*

Tetrahedron: Asymmetry *13 (2002) 155*

Sang-sup Jew,* Doo-Yeon Lim, Jin-Yee Kim, Sung-ji Kim, Eun-young Roh, Hyo-Jeong Yi, Jin-Mo Ku, Boon-saeng Park, Byeong-seon Jeong and Hyeung-geun Park*



(2*S*)-6-(Benzyloxy)-2-methyl-1,2-hexanediol

E.e. = 99%

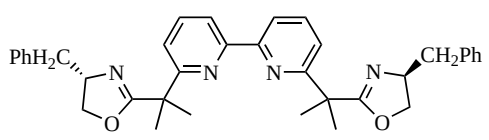
$[\alpha]_D^{20} = -5.3$ (*c* 0.92, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 2*S*

Tetrahedron: Asymmetry *13 (2002) 161*

Yi-Zhou Zhu, Zhi-Peng Li, Jun-An Ma, Fang-Yi Tang, Li Kang, Qi-Lin Zhou* and Albert S. C. Chan



$C_{36}H_{38}N_4O_2$

6,6′-Bis[1-[(4*S*,4′*S*)-4-benzyl-4,5-dihydro-oxazol-2-yl]-1-methyl-ethyl]-[2,2′]bipyridinyl

E.e. = 100%

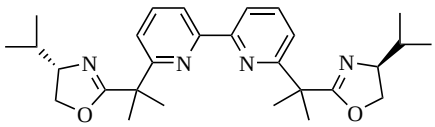
$[\alpha]_D^{20} = -13$ (*c* 1.0, $CHCl_3$)

Source of chirality: chiral pool

Absolute configuration: *S*,*S*

Tetrahedron: Asymmetry *13 (2002) 161*

Yi-Zhou Zhu, Zhi-Peng Li, Jun-An Ma, Fang-Yi Tang, Li Kang, Qi-Lin Zhou* and Albert S. C. Chan



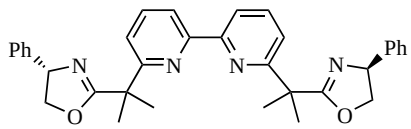
E.e. = 100%
$[\alpha]_D^{20} = -62$ (*c* 1.0, $CHCl_3$)
Source of chirality: chiral pool
Absolute configuration: *S*,*S*

$C_{28}H_{38}N_4O_2$

6,6′-Bis[1-[(4*S*,4′*S*)-4-isopropyl-4,5-dihydro-oxazol-2-yl]-1-methyl-ethyl]-[2,2′]bipyridinyl

Tetrahedron: Asymmetry *13 (2002) 161*

Yi-Zhou Zhu, Zhi-Peng Li, Jun-An Ma, Fang-Yi Tang, Li Kang, Qi-Lin Zhou* and Albert S. C. Chan



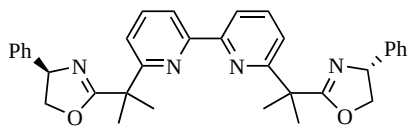
E.e. = 100%
$[\alpha]_D^{20} = -151$ (*c* 1.0, $CHCl_3$)
Source of chirality: chiral pool
Absolute configuration: *S*,*S*

$C_{34}H_{34}N_4O_2$

6,6′-Bis[1-[(4*S*,4′*S*)-4-phenyl-4,5-dihydro-oxazol-2-yl]-1-methyl-ethyl]-[2,2′]bipyridinyl

Tetrahedron: Asymmetry *13 (2002) 161*

Yi-Zhou Zhu, Zhi-Peng Li, Jun-An Ma, Fang-Yi Tang, Li Kang, Qi-Lin Zhou* and Albert S. C. Chan



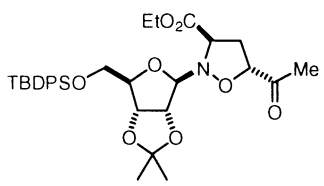
E.e. = 100%
$[\alpha]_D^{20} = +149$ (*c* 1.0, $CHCl_3$)
Source of chirality: chiral pool
Absolute configuration: *R*,*R*

$C_{34}H_{34}N_4O_2$

6,6′-Bis[1-[(4*R*,4′*R*)-4-phenyl-4,5-dihydro-oxazol-2-yl]-1-methyl-ethyl]-[2,2′]bipyridinyl

Tetrahedron: Asymmetry *13 (2002) 167*

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo



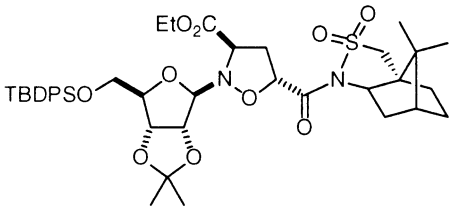
D.r. = 66% (by HPLC)
$[\alpha]_D^{25} = -12$ (*c* 1.10, $CHCl_3$)
Source of chirality: D-ribose
Absolute configuration: 3*R*,5*R*

$C_{32}H_{43}NO_8Si$

5-Acetyl-2-[5-(*tert*-butyldiphenylsilyl)-1-deoxy-2,3-*O*-isopropylidene-D-ribo-1,4-pentofuranose-1-yl]-isoxazolidine-3-carboxylic acid ethyl ester

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo

Tetrahedron: Asymmetry *13 (2002) 167*



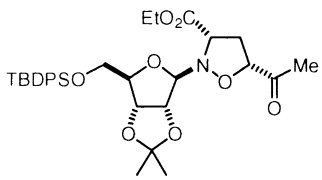
D.r. = 95% (by HPLC)
$[\alpha]_D^{25} = -62$ (*c* 1.31, $CHCl_3$)
Source of chirality: D-ribose and Oppolzer's sultam
Absolute configuration: 3*R*,5*R*,1′*S*,5′*R*,7′*R*

$C_{41}H_{56}N_2O_{10}SSi$

2-[5-(*tert*-Butyldiphenylsilyl)-1-deoxy-2,3-*O*-isopropylidene-D-ribo-1,4-pentofuranose-1-yl]-5-[10,10-dimethyl-3,3-dioxo-3λ^6-thia-4-azatricyclo[5.2.1.0^{1,5}]decane-4-carbonyl]-isoxazolidine-3-carboxylic acid ethyl ester

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo

Tetrahedron: Asymmetry *13 (2002) 167*



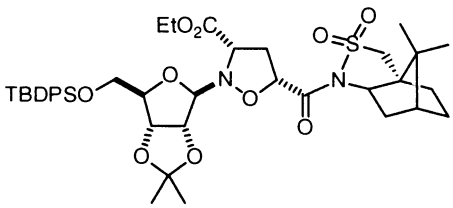
D.r. = 33% (by HPLC)
$[\alpha]_D^{25} = +45$ (*c* 0.20, $CHCl_3$)
Source of chirality: D-ribose
Absolute configuration: 3*S*,5*R*

$C_{32}H_{43}NO_8Si$

5-Acetyl-2-[5-(*tert*-butyldiphenylsilyl)-1-deoxy-2,3-*O*-isopropylidene-D-ribo-1,4-pentofuranose-1-yl]-isoxazolidine-3-carboxylic acid ethyl ester

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo

Tetrahedron: Asymmetry *13 (2002) 167*



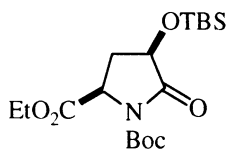
D.r. = 5% (by HPLC)
$[\alpha]_D^{25} = -51$ (*c* 0.34, $CHCl_3$)
Source of chirality: D-ribose
Absolute configuration: 3*S*,5*R*,1′*S*,5′*R*,7′*R*

$C_{41}H_{56}N_2O_{10}SSi$

2-[5-(*tert*-Butyldiphenylsilyl)-1-deoxy-2,3-*O*-isopropylidene-D-ribo-1,4-pentofuranose-1-yl]-5-[10,10-dimethyl-3,3-dioxo-3λ^6-thia-4-aza-tricyclo[5.2.1.0^{1,5}]decane-4-carbonyl]-isoxazolidine-3-carboxylic acid ethyl ester

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo

Tetrahedron: Asymmetry *13 (2002) 167*



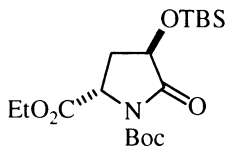
D.r. = 95% (by HPLC)
$[\alpha]_D^{25} = +44$ (*c* 0.45, $CHCl_3$)
Source of chirality: D-ribose
Absolute configuration: 2*R*,4*R*

$C_{18}H_{33}NO_6Si$

1-*tert*-Butyl 2-ethyl 4-[(*tert*-butyldimethylsilyl)oxy]-5-oxo-pyrrolidine-1,2-dicarboxylate

Tetrahedron: Asymmetry *13 (2002) 167*

Pedro Merino,* Julia Revuelta, Tomas Tejero, Ugo Chiacchio,* Antonio Rescifina, Anna Piperno and Giovanni Romeo



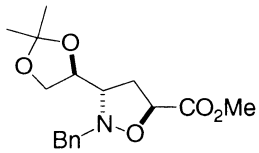
$C_{18}H_{33}NO_6Si$

1-*tert*-Butyl 2-ethyl 4-[(*tert*-butyldimethylsilyl)oxy]-5-oxo-pyrrolidine-1,2-dicarboxylate

D.r. = 5% (by HPLC)
$[\alpha]_D^{25} = +39$ (*c* 0.32, $CHCl_3$)
Source of chirality: D-ribose
Absolute configuration: 2*S*,4*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta, Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo and Roberto Romeo



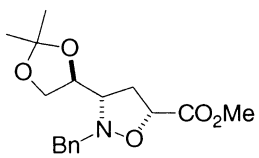
$C_{17}H_{23}NO_5$

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid methyl ester

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = +20$ (*c* 0.17, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta, Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo and Roberto Romeo



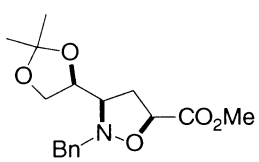
$C_{17}H_{23}NO_5$

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid methyl ester

D.r. = 23% (by HPLC)
$[\alpha]_D^{25} = -12$ (*c* 0.18, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta, Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo and Roberto Romeo



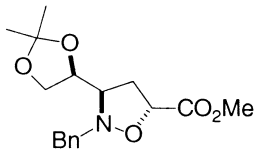
$C_{17}H_{23}NO_5$

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid methyl ester

D.r. = 11% (by HPLC)
$[\alpha]_D^{25} = +61$ (*c* 0.17, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



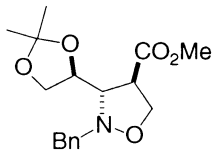
$C_{17}H_{23}NO_5$

D.r. = 3% (by HPLC)
$[\alpha]_D^{25} = +57$ (*c* 0.18, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*R*

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



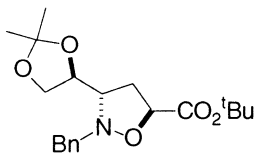
$C_{17}H_{23}NO_5$

D.r. = traces (by HPLC)
$[\alpha]_D^{25} = +18$ (*c* 0.15, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,4*R*

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-4-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



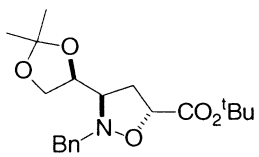
$C_{20}H_{29}NO_5$

D.r. = 53% (by HPLC)
$[\alpha]_D^{25} = +33$ (*c* 0.56, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid *tert*-butyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



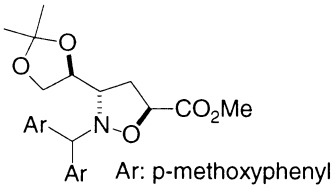
$C_{20}H_{29}NO_5$

D.r. = 11% (by HPLC)
$[\alpha]_D^{25} = +44$ (*c* 0.28, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*R*

2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidine-5-carboxylic acid *tert*-butyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



$C_{25}H_{31}NO_7$

D.r. = 35% (by HPLC)

$[\alpha]_D^{25} = +28$ (*c* 0.56, $CHCl_3$)

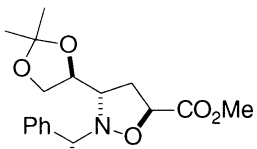
Source of chirality: D-glyceraldehyde

Absolute configuration: 3*S*,5*S*

2-[Bis-(4-methoxyphenyl)-methyl]-3-(2,2-dimethyl-[1,3]dioxolan-4-yl)-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



$C_{18}H_{25}NO_5$

D.r. = 75% (by HPLC)

$[\alpha]_D^{25} = +79$ (*c* 0.28, $CHCl_3$)

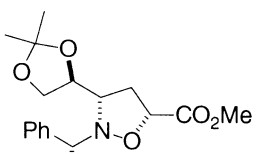
Source of chirality: D-glyceraldehyde and (*R*)-α-methylbenzylamine

Absolute configuration: 3*S*,5*S*

3-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-2-[(1*R*)-1-phenylethyl]-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



$C_{18}H_{25}NO_5$

D.r. = 15% (by HPLC)

$[\alpha]_D^{25} = +36$ (*c* 0.21, $CHCl_3$)

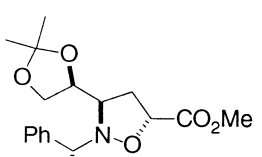
Source of chirality: D-glyceraldehyde and (*R*)-α-methylbenzylamine

Absolute configuration: 3*S*,5*R*

3-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-2-[(1*R*)-1-phenylethyl]-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



$C_{18}H_{25}NO_5$

D.r. = 2% (by HPLC)

$[\alpha]_D^{25} = +46$ (*c* 0.14, $CHCl_3$)

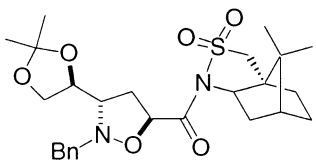
Source of chirality: D-glyceraldehyde and (*R*)-α-methylbenzylamine

Absolute configuration: 3*R*,5*R*

3-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-2-[(1*R*)-1-phenylethyl]-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



D.r. = 60% (by HPLC)

$[\alpha]_D^{25} = -8$ (c 0.33, $CHCl_3$)

Source of chirality: D-glyceraldehyde and Oppolzer's sultam

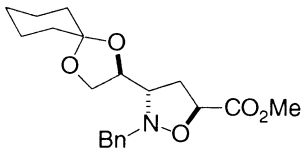
Absolute configuration: 3*S*,5*S*

$C_{26}H_{36}N_2SO_6$

{2-Benzyl-3-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-isoxazolidin-5-yl}-(10,10-dimethyl-3,3-dioxo-3λ^6-thia-4-azatricyclo[5.2.1.0^{1,5}]dec-4-yl)-methanone

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



D.r. = 52% (by HPLC)

$[\alpha]_D^{25} = -1$ (c 0.22, $CHCl_3$)

Source of chirality: D-glyceraldehyde

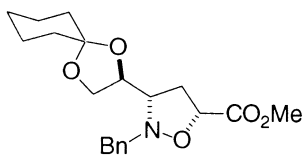
Absolute configuration: 3*S*,5*S*

$C_{20}H_{27}NO_5$

2-Benzyl-3-(1,4-dioxa-spiro[4.5]dec-2-yl)-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



D.r. = 18% (by HPLC)

$[\alpha]_D^{25} = +16$ (c 0.35, $CHCl_3$)

Source of chirality: D-glyceraldehyde

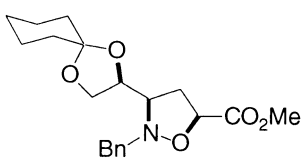
Absolute configuration: 3*S*,5*R*

$C_{20}H_{27}NO_5$

2-Benzyl-3-(1,4-dioxa-spiro[4.5]dec-2-yl)-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



D.r. = 15% (by HPLC)

$[\alpha]_D^{25} = +2$ (c 0.31, $CHCl_3$)

Source of chirality: D-glyceraldehyde

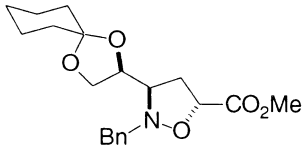
Absolute configuration: 3*R*,5*S*

$C_{20}H_{27}NO_5$

2-Benzyl-3-(1,4-dioxa-spiro[4.5]dec-2-yl)-isoxazolidine-5-carboxylic acid methyl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



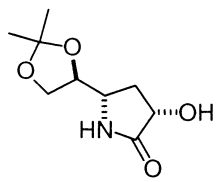
$C_{20}H_{27}NO_5$

2-Benzyl-3-(1,4-dioxa-spiro[4.5]dec-2-yl)-isoxazolidine-5-carboxylic acid methyl ester

D.r. = 15% (by HPLC)
$[\alpha]_D^{25} = -5$ (*c* 0.11, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



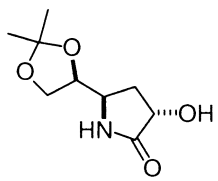
$C_9H_{15}NO_4$

5-((4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl)-3-hydroxy-pyrroloidin-2-one

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -5$ (*c* 0.92, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



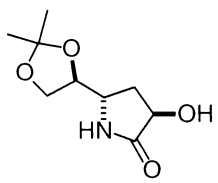
$C_9H_{15}NO_4$

5-((4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl)-3-hydroxy-pyrrolidin-2-one

D.r. = 23% (by HPLC)
$[\alpha]_D^{25} = -30$ (*c* 0.43, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



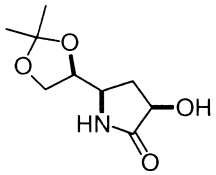
$C_9H_{15}NO_4$

5-((4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl)-3-hydroxy-pyrrolidin-2-one

D.r. = 11% (by HPLC)
$[\alpha]_D^{25} = -22$ (*c* 0.21, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



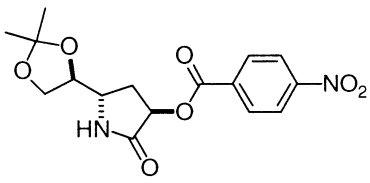
D.r. = 3% (by HPLC)
$[\alpha]_D^{25} = -19$ (*c* 0.99, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*R*

$C_9H_{15}NO_4$

5-((4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl)-3-hydroxy-pyrrolidin-2-one

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



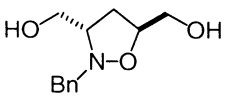
D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -19$ (*c* 0.40, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*S*

$C_{16}H_{18}N_2O_7$

4-Nitro-benzoic acid 5-[(4*R*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



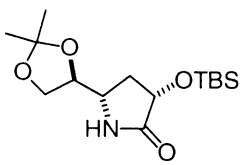
D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = +8$ (*c* 0.78, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

$C_{12}H_{17}NO_3$

2-Benzyl-3,5-bis(hydroxymethyl)isoxazolidine

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



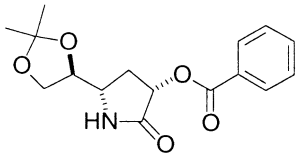
D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = +9$ (*c* 0.28, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

$C_{15}H_{29}NO_4Si$

5-((4*R*)-2,2-Dimethyl-1,3-dioxolan-4-yl)-3-(*tert*-butyldimethylsiloxy)-pyrrolidin-2-one

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



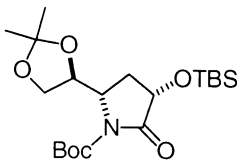
$C_{16}H_{19}NO_5$

Benzoic acid 5-[(4*R*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = +17$ (*c* 0.20, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



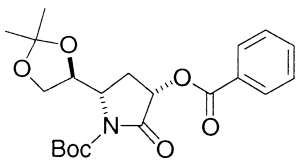
$C_{20}H_{37}NO_6Si$

1-(*tert*-Butoxycarbonyl)-5-((4*R*)-2,2-dimethyl-1,3-dioxolan-4-yl)-3-(*tert*-butyldimethylsiloxy)-pyrrolidin-2-one

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -44$ (*c* 0.48, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



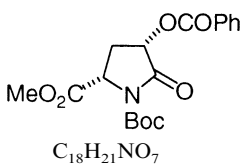
$C_{21}H_{27}NO_7$

5-[(4*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl]-3-(benzoyloxy)-2-oxo-pyrrolidine-1-carboxylic acid *tert*-butyl ester

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -49$ (*c* 0.57, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



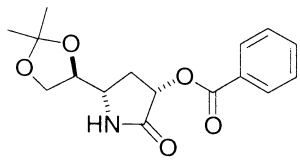
$C_{18}H_{21}NO_7$

4-(Benzoyloxy)-5-oxo-pyrrolidine-1,2-dicarboxylic acid 1-*tert*-butyl ester 2-methyl ester

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -10$ (*c* 0.19, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 2*S*,4*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



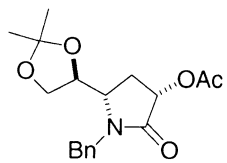
D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -4$ (*c* 0.14, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

$C_{14}H_{23}NO_6$

Carbonic acid *tert*-butyl ester 5-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



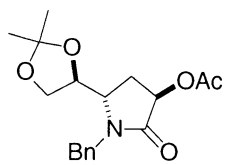
D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = -45$ (*c* 0.26, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*S*

$C_{18}H_{23}NO_5$

Acetic acid 1-benzyl-5-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



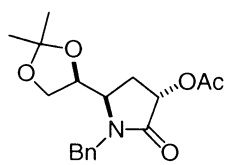
D.r. = 23% (by HPLC)
$[\alpha]_D^{25} = +18$ (*c* 0.41, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*S*

$C_{18}H_{23}NO_5$

Acetic acid 1-benzyl-5-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



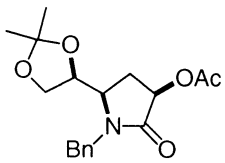
D.r. = 11% (by HPLC)
$[\alpha]_D^{25} = -49$ (*c* 0.48, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*S*,5*R*

$C_{18}H_{23}NO_5$

Acetic acid 1-benzyl-5-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



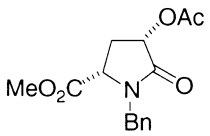
$C_{18}H_{23}NO_5$

Acetic acid 1-benzyl-5-[(4*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-2-oxo-pyrrolidin-3-yl ester

D.r. = 3% (by HPLC)
$[\alpha]_D^{25} = -27$ (*c* 0.32, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 3*R*,5*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



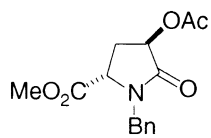
$C_{15}H_{17}NO_5$

4-Acetoxy-1-benzyl-5-oxo-pyrrolidine-2-carboxylic acid methyl ester

D.r. = 63% (by HPLC)
$[\alpha]_D^{25} = +17$ (*c* 0.46, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 2*S*,4*S*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



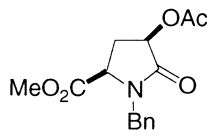
$C_{15}H_{17}NO_5$

4-Acetoxy-1-benzyl-5-oxo-pyrrolidine-2-carboxylic acid methyl ester

D.r. = 23% (by HPLC)
$[\alpha]_D^{25} = -7$ (*c* 0.50, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 2*S*,4*R*

Tetrahedron: Asymmetry *13 (2002) 173*

Pedro Merino,* Juan A. Mates, Julia Revuelta,
Tomas Tejero, Ugo Chiacchio, Giovanni Romeo,* Daniela Iannazzo
and Roberto Romeo



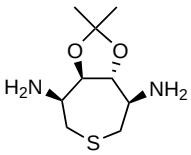
$C_{15}H_{17}NO_5$

4-Acetoxy-1-benzyl-5-oxo-pyrrolidine-2-carboxylic acid methyl ester

D.r. = 3% (by HPLC)
$[\alpha]_D^{25} = -16$ (*c* 0.40, $CHCl_3$)
Source of chirality: D-glyceraldehyde
Absolute configuration: 2*R*,4*R*

Tetrahedron: Asymmetry *13 (2002) 191*

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci



$C_9H_{18}N_2O_2S$

(−)-(3*S*,4*R*,5*R*,6*R*)-3,6-Diamino-4,5-*O*-isopropylidenethiepane

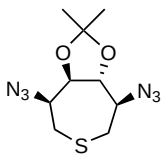
E.e. = 100%

$[\alpha]_D^{25} = -22.4$ ($c = 0.91$, CH_3OH)

Source of chirality: D-sorbitol

Tetrahedron: Asymmetry *13 (2002) 191*

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci



$C_9H_{14}N_6O_2S$

(+)-(3*S*,4*R*,5*R*,6*R*)-3,6-Diazido-4,5-*O*-isopropylidenethiepane

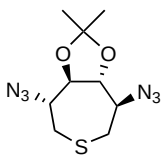
E.e. = 100%

$[\alpha]_D^{25} = 52.5$ ($c = 0.87$, $CHCl_3$)

Source of chirality: D-sorbitol

Tetrahedron: Asymmetry *13 (2002) 191*

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci



$C_9H_{14}N_6O_2S$

(+)-(3*R*,4*R*,5*R*,6*R*)-3,6-Diazido-4,5-*O*-isopropylidenethiepane

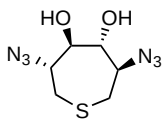
E.e. = 100%

$[\alpha]_D^{25} = 71.4$ ($c = 1.22$, $CHCl_3$)

Source of chirality: D-mannitol

Tetrahedron: Asymmetry *13 (2002) 191*

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci



$C_6H_{10}N_6O_2S$

(+)-(3*R*,4*R*,5*R*,6*R*)-3,6-Diazido-4,5-*O*-dihydroxythiepane

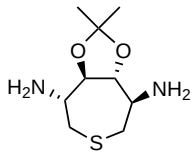
E.e. = 100%

$[\alpha]_D^{25} = 84.2$ ($c = 0.99$, $CHCl_3$)

Source of chirality: D-mannitol

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci

Tetrahedron: Asymmetry *13 (2002) 191*



$C_9H_{18}N_2O_2S$

(+)-(3*R*,4*R*,5*R*,6*R*)-3,6-Diamino-4,5-*O*-isopropylidenethiepane

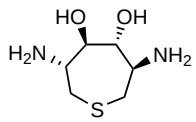
E.e. = 100%

$[\alpha]_D^{25} = 56.4$ ($c = 0.82$, $CHCl_3$)

Source of chirality: D-mannitol

Antonio Arcelli, Vanda Cerè,* Francesca Peri, Salvatore Pollicino and Alfredo Ricci

Tetrahedron: Asymmetry *13 (2002) 191*



$C_6H_{14}N_2O_2S$

(+)-(3*R*,4*R*,5*R*,6*R*)-3,6-Diamino-4,5-dihydroxythiepane

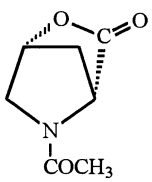
E.e. = 100%

$[\alpha]_D^{25} = 76.2$ ($c = 0.79$, CH_3OH)

Source of chirality: D-mannitol

Piero Dalla Croce and Concetta La Rosa*

Tetrahedron: Asymmetry *13 (2002) 197*



$C_7H_9NO_3$

(1*R*,4*R*)-*N*-Acetyl-2-oxa-5-aza-bicyclo[2.2.1]heptan-3-one

E.e. >98%

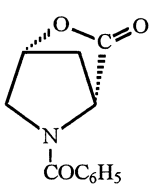
$[\alpha]_D = -60.5$ (c 1.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,4*R*)

Piero Dalla Croce and Concetta La Rosa*

Tetrahedron: Asymmetry *13 (2002) 197*



$C_{12}H_{11}NO_3$

(1*R*,4*R*)-*N*-Benzoyl-2-oxa-5-aza-bicyclo[2.2.1]heptan-3-one

E.e. = 100%

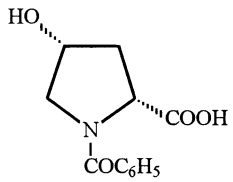
$[\alpha]_D = -92.75$ (c 1.00, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,4*R*)

Piero Dalla Croce and Concetta La Rosa*

Tetrahedron: Asymmetry *13 (2002) 197*



$C_{12}H_{13}NO_4$

(2*R*,4*R*)-*N*-Benzoyl-4-hydroxyproline

E.e. = 100%

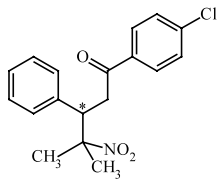
$[\alpha]_D = +71.25$ (*c* 1.00, EtOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,4*R*)

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{18}H_{18}NO_3Cl$

1-(4-Chlorophenyl)-4-methyl-4-nitro-3-phenylpentan-1-one

E.e. = 56% (^{1}H NMR with Eu(hfc)$_3$)

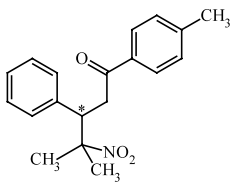
$[\alpha]_D^{22}$ +58.5 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

Absolute configuration: *R* (assigned by chemical method)

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{19}H_{21}NO_3$

1-(4-Tolyl)-4-methyl-4-nitro-3-phenylpentan-1-one

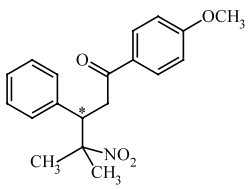
E.e. = 64% (^{1}H NMR with Eu(hfc)$_3$)

$[\alpha]_D^{22}$ +65.7 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{19}H_{21}NO_4$

1-(4-Methoxyphenyl)-4-methyl-4-nitro-3-phenylpentan-1-one

E.e. = 100%

$[\alpha]_D^{22}$ +111.2 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

Absolute configuration: *R* (assigned by X-ray analysis)

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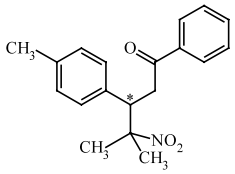
Tetrahedron: Asymmetry *13 (2002) 203*



E.e. = 48% (^{1}H NMR with Eu(hfc)$_3$)

$[\alpha]_D^{22}$ +52.9 (*c* 1, CH_2Cl_2)

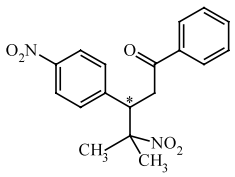
Source of chirality: asymmetric synthesis with chiral catalyst

$C_{19}H_{21}NO_3$

4-Methyl-4-nitro-3-(4-tolyl)-1-phenylpentan-1-one

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



E.e. = 100%

$[\alpha]_D^{22}$ +118.5 (*c* 1, CH_2Cl_2)

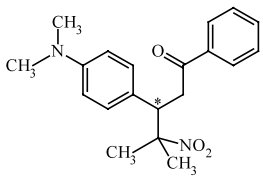
Source of chirality: asymmetric synthesis with chiral catalyst

$C_{18}H_{18}N_2O_5$

4-Methyl-4-nitro-3-(4-nitrophenyl)-1-phenylpentan-1-one

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



E.e. = 29% (^{1}H NMR with Eu(hfc)$_3$)

$[\alpha]_D^{22}$ +60.2 (*c* 1, CH_2Cl_2)

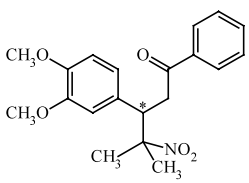
Source of chirality: asymmetric synthesis with chiral catalyst

$C_{20}H_{24}N_2O_3$

4-Methyl-4-nitro-3-(4-dimethylaminophenyl)-1-phenylpentan-1-one

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



E.e. = 42% (^{1}H NMR with Eu(hfc)$_3$)

$[\alpha]_D^{22}$ +75.0 (*c* 1, CH_2Cl_2)

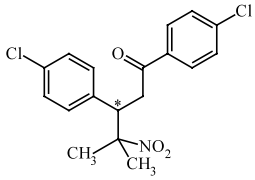
Source of chirality: asymmetric synthesis with chiral catalyst

$C_{20}H_{23}NO_5$

4-Methyl-4-nitro-3-(3,4-dimethoxyphenyl)-1-phenylpentan-1-one

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{18}H_{17}NO_3Cl_2$

4-Methyl-4-nitro-3-(4-chlorophenyl)-1-(4-chlorophenyl)pentan-1-one

E.e. = 39% (^{1}H NMR with Eu(hfc)$_3$)

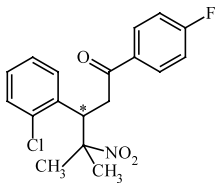
$[\alpha]_D^{22}$ +50.6 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

Absolute configuration: *R* (assigned by chemical transformation to a known compound)

Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{18}H_{17}NO_3ClF$

4-Methyl-4-nitro-3-(2-chlorophenyl)-1-(4-fluorophenyl)pentan-1-one

E.e. = 43% (^{1}H NMR with Eu(hfc)$_3$)

$[\alpha]_D^{22}$ +46.5 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

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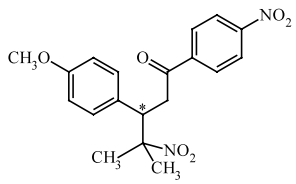
Tibor Bakó, Péter Bakó,* Áron Szöllõsy, Mátyás Czugler, György Keglevich and László Tõke

Tetrahedron: Asymmetry *13 (2002) 203*



$C_{19}H_{20}N_2O_6$

4-Methyl-4-nitro-3-(4-methoxyphenyl)-1-(4-nitrophenyl)pentan-1-one

E.e. = 100%

$[\alpha]_D^{22}$ +45.4 (*c* 1, CH_2Cl_2)

Source of chirality: asymmetric synthesis with chiral catalyst

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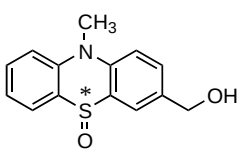
Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*

Tetrahedron: Asymmetry *13 (2002) 211*



$C_{14}H_{13}NO_2S$

(−)-(10-Methyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

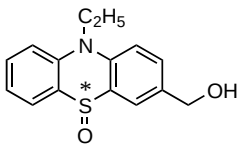
E.e. = 20%

$[\alpha]_D^{25} = -6.8$ (*c* 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Tetrahedron: Asymmetry *13 (2002) 211*

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*



$C_{15}H_{15}NO_2S$

(−)-(10-Ethyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

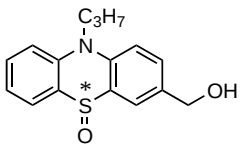
E.e. = 23%

$[\alpha]_D^{25} = -7.1$ (*c* 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Tetrahedron: Asymmetry *13 (2002) 211*

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*



$C_{16}H_{17}NO_2S$

(−)-(10-Propyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

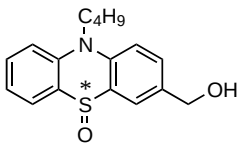
E.e. = 17%

$[\alpha]_D^{25} = -6.2$ (*c* 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Tetrahedron: Asymmetry *13 (2002) 211*

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*



$C_{17}H_{19}NO_2S$

(−)-(10-Butyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

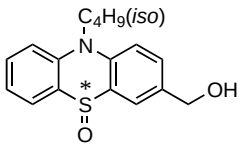
E.e. = 11%

$[\alpha]_D^{25} = -3.5$ (*c* 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Tetrahedron: Asymmetry *13 (2002) 211*

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*



$C_{17}H_{19}NO_2S$

(−)-(10-(3-Methylpropyl)-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

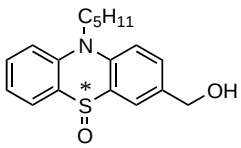
E.e. = 21%

$[\alpha]_D^{25} = -7.0$ (*c* 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*

Tetrahedron: Asymmetry *13 (2002) 211*



$C_{18}H_{21}NO_2S$

(−)-(10-Pentyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

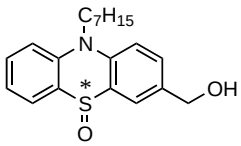
E.e. = 25%

$[\alpha]_D^{25} = -4.0$ (c 1, $CHCl_3$)

Source of chirality: Baker's yeast reduction of the corresponding racemic aldehyde

Monica Toşa, Csaba Paizs, Cornelia Majdik, Lajos Novák, Pál Kolonits, Florin-Dan Irimie* and László Poppe*

Tetrahedron: Asymmetry *13 (2002) 211*



$C_{20}H_{25}NO_2S$

(−)-(10-Heptyl-5-oxo-5,10-dihydro-5λ^4-phenothiazin-3-yl)methanol

E.e. = 87%

$[\alpha]_D^{25} = -2.8$ (c 1, $CHCl_3$)

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