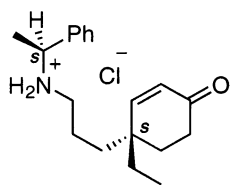


E. Vázquez, A. Galindo,* D. Gnecco,* S. Bernès, J. L. Terán and R. G. Enríquez

Tetrahedron: Asymmetry 12 (2001) 3209



$C_{19}H_{28}ClNO$

(-)-(4*S*)-Ethyl-4-[3-(1'*S*-phenyl-ethylamino)-propyl]-cyclohex-2-enone hydrochloride

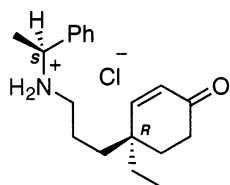
$[\alpha]_D = -50.5$ ($c = 1.0$, CH_2Cl_2)

Source of chirality: (*S*)-(-)-1-phenylethylamine

Absolute configuration: 4*S*

E. Vázquez, A. Galindo,* D. Gnecco,* S. Bernès, J. L. Terán and R. G. Enríquez

Tetrahedron: Asymmetry 12 (2001) 3209



$C_{19}H_{28}ClNO$

(+)-(4*R*)-Ethyl-4-[3-(1'*S*-phenyl-ethylamino)-propyl]-cyclohex-2-enone hydrochloride

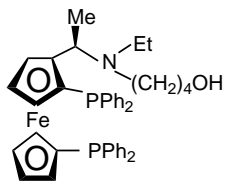
$[\alpha]_D = +16$ ($c = 1.0$, CH_2Cl_2)

Source of chirality: (*S*)-(-)-1-phenylethylamine

Absolute configuration: 4*R*

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{42}H_{45}FeNOP_2$

(*R*)-*N*-Ethyl-*N*-(4-hydroxybutyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

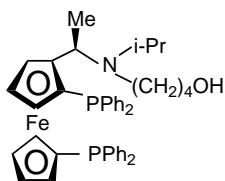
$[\alpha]_D = -326.2$ ($c = 0.29$, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{43}H_{47}FeNOP_2$

(*R*)-*N*-Isopropyl-*N*-(4-hydroxybutyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

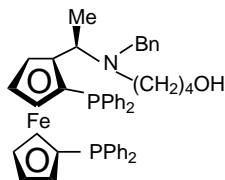
$[\alpha]_D = -325.4$ ($c = 0.28$, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{47}H_{47}FeNOP_2$

(*R*)-*N*-Benzyl-*N*-(4-hydroxybutyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

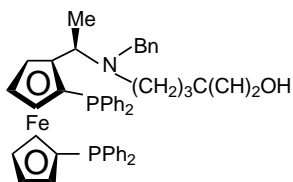
$[\alpha]_D = -337.7$ (*c* 0.52, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{49}H_{51}FeNOP_2$

(*R*)-*N*-Benzyl-*N*-(4-hydroxy-4,4-dimethylbutyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

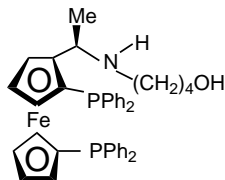
$[\alpha]_D = -287.0$ (*c* 0.54, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{40}H_{41}FeNOP_2$

(*R*)-*N*-(4-Hydroxybutyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

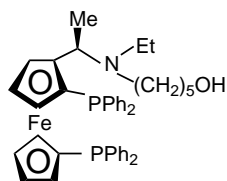
$[\alpha]_D = -263.3$ (*c* 0.51, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{43}H_{47}FeNOP_2$

(*R*)-*N*-Ethyl-*N*-(5-hydroxypentyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

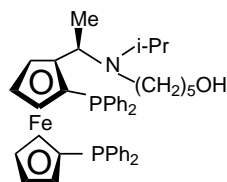
$[\alpha]_D = -265.3$ (*c* 0.12, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{44}H_{49}FeNOP_2$

(*R*)-*N*-Isopropyl-*N*-(5-hydroxypentyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

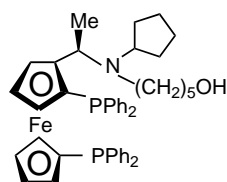
$[\alpha]_D = -216.0$ (*c* 0.28, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{46}H_{51}FeNOP_2$

(*R*)-*N*-Cyclopentyl-*N*-(5-hydroxypentyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

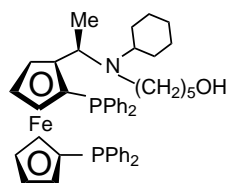
$[\alpha]_D = -284.0$ (*c* 0.20, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

Xu-Chang He, Bin Wang, Gengli Yu and Donglu Bai*

Tetrahedron: Asymmetry 12 (2001) 3213



$C_{47}H_{53}FeNOP_2$

(*R*)-*N*-Cyclohexyl-*N*-(5-hydroxypentyl)-1-[(*S*)-1',2-bis(diphenylphosphino)ferrocenyl]ethyl amine

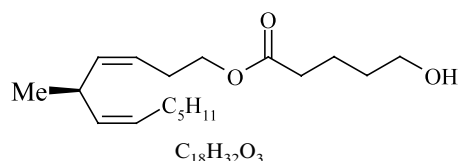
$[\alpha]_D = -323.0$ (*c* 0.20, $CHCl_3$)

Source of chirality: resolution and stereoselective reactions

Absolute configuration: (*R*),1-(*S*)

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



$C_{18}H_{32}O_3$

5-Methyl-(3*Z*,5*R*,6*Z*)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 90%

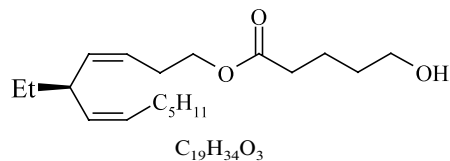
$[\alpha]_D^{25} = +2.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Ethyl-(3Z,5R,6Z)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 91%

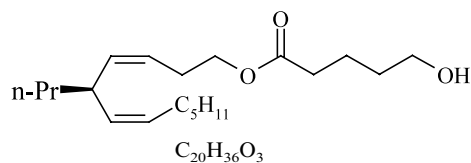
$[\alpha]_D^{25} = +11.0$ (c 1.2, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Propyl-(3Z,5R,6Z)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 85%

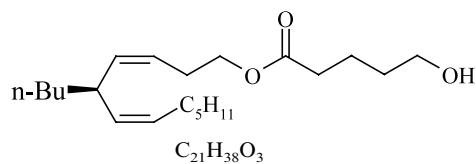
$[\alpha]_D^{25} = +5.2$ (c 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Butyl-(3Z,5R,6Z)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 90%

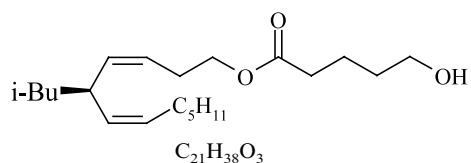
$[\alpha]_D^{25} = +9.8$ (c 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Isobutyl-(3Z,5R,6Z)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 84%

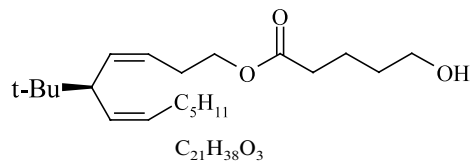
$[\alpha]_D^{25} = +6.2$ (c 1.1, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-(*tert*-Butyl)-(3*Z*,5*R*,6*Z*)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 91%

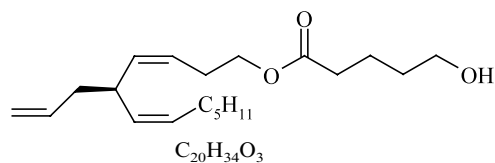
$[\alpha]_D^{25} = +1.9$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Allyl-(3*Z*,5*R*,6*Z*)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 89%

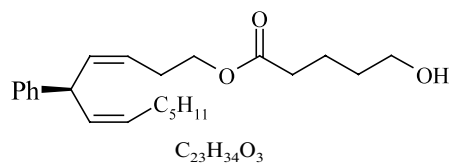
$[\alpha]_D^{25} = +10.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Phenyl-(3*Z*,5*R*,6*Z*)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 75%

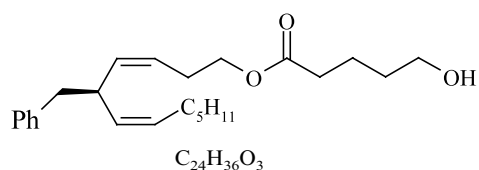
$[\alpha]_D^{25} = -19.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Benzyl-(3*Z*,5*R*,6*Z*)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 92%

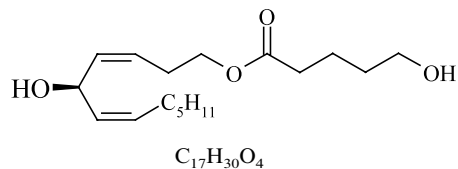
$[\alpha]_D^{25} = +12.4$ (*c* 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

J. S. Yadav* and S. Nanda

Tetrahedron: Asymmetry 12 (2001) 3223



5-Hydroxy-(3Z,5R,6Z)-3,6-dodecadienyl-5-hydroxypentaonate

E.e. = 96%

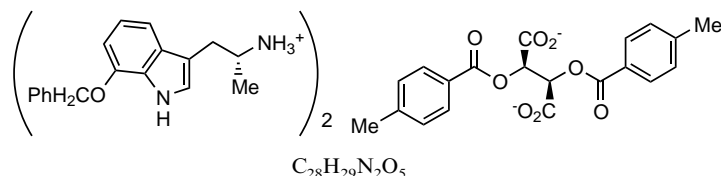
$[\alpha]_D^{25} = +13.0$ (c 1.0, $CHCl_3$)

Source of chirality: enzyme-catalyzed transesterification

Absolute configuration: *R*

Akihito Fujii, Yoshito Fujima, Hiroshi Harada, Masaya Ikunaka,*
Toru Inoue, Shiro Kato and Keisuke Matsuyama

Tetrahedron: Asymmetry 12 (2001) 3235



Bis [(*R*)-2-(7-benzyloxy-3-indolyl)-1-methylethylammonium] *O,O'*-di-*p*-toluoyl *L*-(2*R*,3*R*)-tartrate

D.e. = 99.5%

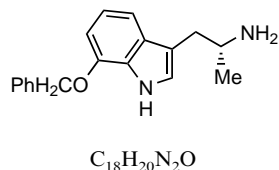
$[\alpha]_D^{20} = -71.8$ (c 1.00, MeOH)

Source of chirality: resolution

Absolute configuration: *R/R,R*

Akihito Fujii, Yoshito Fujima, Hiroshi Harada, Masaya Ikunaka,*
Toru Inoue, Shiro Kato and Keisuke Matsuyama

Tetrahedron: Asymmetry 12 (2001) 3235



(*R*)-3-(2-Aminopropyl)-7-benzyloxyindole

E.e. = 99.7%

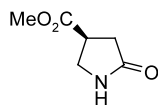
$[\alpha]_D^{20} = -17.8$ (c 0.50, MeOH)

Source of chirality: resolution

Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl,
Marco Visintin and Ennio Valentin*

Tetrahedron: Asymmetry 12 (2001) 3241



Methyl (*S*)-(-)-5-oxo-3-pyrrolidinecarboxylate

E.e. = 76% (by chiral HRGC)

$[\alpha]_D^{20} = -7.3$ (c 0.7, MeOH)

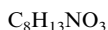
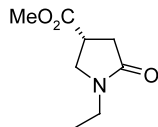
$\Delta\epsilon_{209} = -0.88$ (MeOH)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl,
Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

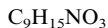
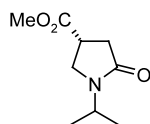


Methyl (*R*)-(+)-1-ethyl-5-oxo-3-pyrrolidinecarboxylate

E.e. = 95% (by chiral HRGC)
 $[\alpha]_D^{25} = +8.7$ (*c* 1.1, MeOH)
 $\Delta\epsilon_{214} = +1.50$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl,
Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

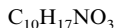
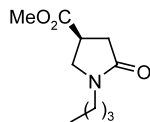


Methyl (*R*)-(+)-1-(methylethyl)-5-oxo-3-pyrrolidinecarboxylate

E.e. = 95% (by chiral HRGC)
 $[\alpha]_D^{25} = +2.9$ (*c* 0.7, MeOH)
 $\Delta\epsilon_{213.4} = +1.83$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl,
Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

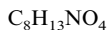
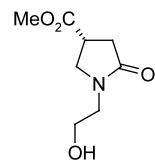


Methyl (*S*)-(-)-1-(1-butyl)-5-oxo-3-pyrrolidinecarboxylate

E.e. = 96% (by chiral HRGC)
 $[\alpha]_D^{25} = -5.0$ (*c* 0.9, MeOH)
 $\Delta\epsilon_{214} = -1.9$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *S*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl,
Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

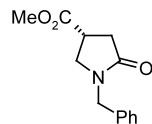


Methyl (*R*)-(+)-1-(2-hydroxyethyl)-5-oxo-3-pyrrolidinecarboxylate

E.e. = 99% (by chiral HRGC)
 $[\alpha]_D^{25} = +8.4$ (*c* 0.75, MeOH)
 $\Delta\epsilon_{213} = +1.7$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241



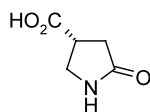
$C_{13}H_{15}NO_3$

Methyl (*R*)-(-)-1-(2-methylphenyl)-5-oxo-3-pyrrolidinecarboxylate

E.e. = 99% (by chiral HRGC)
 $[\alpha]_D^{25} = -19.0$ (c 1.1, MeOH)
 $\Delta\epsilon_{197} = -2.7$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241



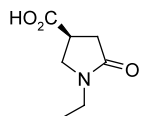
$C_5H_7NO_3$

(*R*)-(+)-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 34% (by chiral HRGC)
 $[\alpha]_D^{25} = +10.2$ (c 1.0, MeOH)
 $\Delta\epsilon_{209} = +0.12$ (c 1.0, MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241



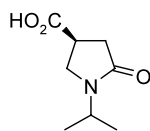
$C_7H_{11}NO_3$

(*S*)-(-)-1-ethyl-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 54% (by chiral HRGC)
 $[\alpha]_D^{25} = -3.5$ (c 1.0, MeOH)
 $\Delta\epsilon_{214} = -1.20$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *S*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241



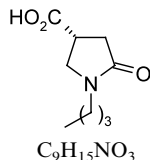
$C_8H_{13}NO_3$

(*S*)-(-)-1-(Methylethyl)-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 88% (by chiral HRGC)
 $[\alpha]_D^{25} = -2.4$ (c 0.45, MeOH)
 $\Delta\epsilon_{213.4} = -1.15$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *S*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

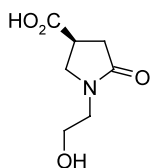


(*R*)-(+)-1-(1-Butyl)-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 75% (by chiral HRGC)
 $[\alpha]_D^{25} = +3.7$ (*c* 1.0, MeOH)
 $\Delta\epsilon_{214} = +0.67$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *R*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

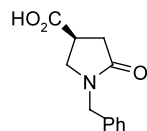


(*S*)-(-)-1-(2-Hydroxyethyl)-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 31% (by chiral HRGC)
 $[\alpha]_D^{25} = -4.4$ (*c* 1.0, MeOH)
 $\Delta\epsilon_{214} = -0.7$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *S*

Fulvia Felluga, Giuliana Pitacco, Massimo Prodan, Sabrina Pricl, Marco Visintin and Ennio Valentini*

Tetrahedron: Asymmetry 12 (2001) 3241

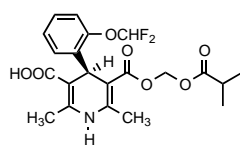


(*S*)-(+)-1-(2-Methylphenyl)-5-oxo-3-pyrrolidinecarboxylic acid

E.e. = 99% (by chiral HRGC)
 $[\alpha]_D^{25} = 15.5$ (*c* 0.5, abs. EtOH)
 $\Delta\epsilon_{197} = +1.66$ (MeOH)
Source of chirality: enzymatic resolution
Absolute configuration: *S*

Arkadij Sobolev, Maurice C. R. Franssen,* Brigita Vigante, Brigita Cekavicus, Natalija Makarova, Gunars Duburs and Aede de Groot

Tetrahedron: Asymmetry 12 (2001) 3251

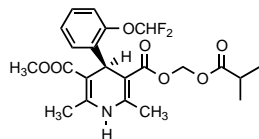


(-)-(4*R*)-4-[2-(Difluoromethoxy)phenyl]-5-[[isobutyryloxy)methoxy]carbonyl]-2,6-dimethyl-1,4-dihydro-3-pyridinecarboxylic acid

E.e. >99%
 $[\alpha]_D^{20} = +26.5$ (*c* 1.0, CHCl₃)
 $[\alpha]_D^{20} = -24.0$ (*c* 1.0, MeOH)
Source of chirality: enzymatic hydrolysis
Absolute configuration: *R* (assigned by X-ray of derivative)

Arkadij Sobolev, Maurice C. R. Franssen,* Brigita Vigante, Brigita Cekavicus, Natalija Makarova, Gunars Duburs and Aede de Groot

Tetrahedron: Asymmetry 12 (2001) 3251



$C_{22}H_{25}F_2NO_7$

(-)-3-[(Isobutyryloxy)methyl] 5-methyl (4*R*)-4-[2-(difluoromethoxy)phenyl]-2,6-dimethyl-1,4-dihydro-3,5-pyridinedicarboxylate

E.e. >99%

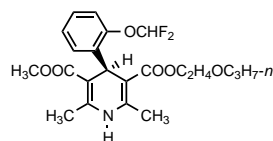
$[\alpha]_D^{20} -17.6$ (c 1.0, $CHCl_3$)

Source of chirality: chiral precursor

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

Arkadij Sobolev, Maurice C. R. Franssen,* Brigita Vigante, Brigita Cekavicus, Natalija Makarova, Gunars Duburs and Aede de Groot

Tetrahedron: Asymmetry 12 (2001) 3251



$C_{22}H_{27}F_2NO_6$

(-)-3-Methyl 5-(2-propoxyethyl) (4*R*)-4-[2-(difluoromethoxy)phenyl]-2,6-dimethyl-1,4-dihydro-3,5-pyridinedicarboxylate

E.e. >99%

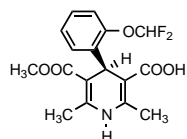
$[\alpha]_D^{20} -19.7$ (c 1.0, $CHCl_3$)

Source of chirality: chiral precursor

Absolute configuration: *R* (assigned by X-ray of derivative of precursor)

Arkadij Sobolev, Maurice C. R. Franssen,* Brigita Vigante, Brigita Cekavicus, Natalija Makarova, Gunars Duburs and Aede de Groot

Tetrahedron: Asymmetry 12 (2001) 3251



$C_{17}H_{17}F_2NO_5$

(-)-(4*S*)-4-[2-(Difluoromethoxy)phenyl]-5-(methoxycarbonyl)-2,6-dimethyl-1,4-dihydro-3-pyridinecarboxylic acid

E.e. >99%

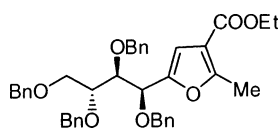
$[\alpha]_D^{20} -51.7$ (c 1.0, $CHCl_3$)

Source of chirality: chiral precursor

Absolute configuration: *S* (assigned by X-ray of derivative)

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



$C_{40}H_{42}O_7$

3-Ethoxycarbonyl-2-methyl-5-(1,2,3,4-tetra-*O*-benzyl-*D*-arabino-tetritol-1-yl)furan

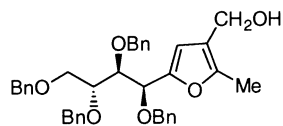
$[\alpha]_D^{25} = -31$ (c 1.0, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 1*S*,2*R*,3*R*; assigned by analogy with diastomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



3-Hydroxymethyl-2-methyl-5-(1,2,3,4-tetra-*O*-benzyl-*D*-arabino-tetritol-1-yl)furan

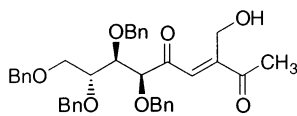
$[\alpha]_D^{25} = -26$ (*c* 2.8, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 1*S*,2*R*,3*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



(*E*)-(6*S*,7*R*,8*R*)-6,7,8,9-Tetrabenzyloxy-3-hydroxymethylnon-3-ene-2,5-dione

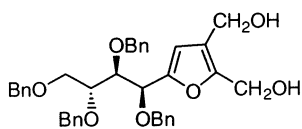
$[\alpha]_D^{25} = -35$ (*c* 1, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 6*S*,7*R*,8*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



2,3-Dihydroxymethyl-5-(1,2,3,4-tetra-*O*-benzyl-*D*-arabino-tetritol-1-yl)furan

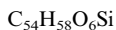
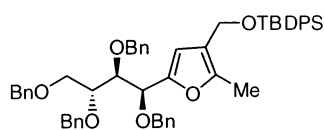
$[\alpha]_D^{25} = -28$ (*c* 1, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 1*S*,2*R*,3*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



5-(1,2,3,4-Tetra-*O*-benzyl-*D*-arabino-tetritol-1-yl)-3-(*tert*-butyldiphenylsilyloxymethyl)-2-methylfuran

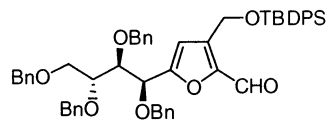
$[\alpha]_D^{25} = -26$ (*c* 1.2, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 1*S*,2*R*,3*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



$C_{54}H_{56}O_7Si$

5-(1,2,3,4-Tetra-*O*-benzyl-*D*-arabino-tetritol-1-yl)-3-(*tert*-butyldiphenylsilyloxymethyl)-2-formylfuran

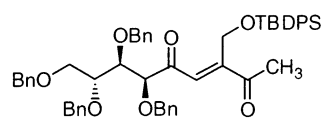
$[\alpha]_D^{25} = -26$ (c 2.5, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 1*S*,2*R*,3*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



$C_{54}H_{58}O_7Si$

(*E*)-(6*S*,7*R*,8*R*)-6,7,8,9-Tetrabenzoyloxy-3-(*tert*-butyldiphenylsilyloxy)methylnon-3-ene-2,5-dione

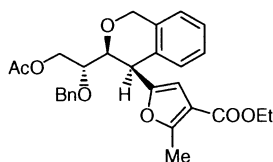
$[\alpha]_D^{25} = -14$ (c 2.2, CH_2Cl_2)

Source of chirality: *D*-glucose

Absolute configuration: 6*S*,7*R*,8*R*; assigned by analogy with diastereomerically pure precursor and NMR

A. J. Moreno-Vargas, J. G. Fernández-Bolaños, J. Fuentes and I. Robina*

Tetrahedron: Asymmetry 12 (2001) 3257



$C_{28}H_{30}O_7$

(4*R*,3*S*,1''*R*)-4-(3-Ethoxycarbonyl-2-methylfur-5-yl)-3-(1,2-diacetoxyethyl)-3,4-dihydro-1*H*-benzo[*c*]pyran

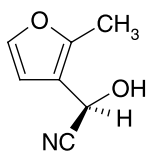
$[\alpha]_D^{25} = -84$ (c 1.4, CH_2Cl_2)

Source of chirality: *D*-glucose and *C*-arylation

Absolute configuration: 4*R*,3*S*,1''*R*; assigned by analogy with diastereomerically pure precursor and NMR

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



$C_7H_7NO_2$

(*R*)-2-Hydroxy-2-(2-methyl-3-furanyl)acetonitrile

E.e. = 24.3%

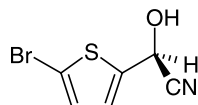
$[\alpha]_D^{21} = +8.2$ (c = 6.5, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



C_6H_4BrNOS

(*S*)-2-Hydroxy-2-(5-bromo-2-thienyl)acetonitrile

E.e. = 86%

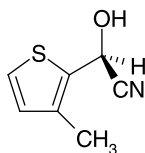
$[\alpha]_D^{25} = +19.7$ ($c = 3.0$, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*S*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



C_7H_7NOS

(*S*)-2-Hydroxy-2-(3-methyl-2-thienyl)acetonitrile

E.e. = 65%

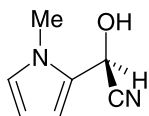
$[\alpha]_D^{25} = +24.5$ ($c = 5.0$, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*S*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



$C_7H_8N_2O$

(*R*)-2-Hydroxy-2-(2-(*N*-methyl)pyrrolyl)acetonitrile

E.e. = 40.1%

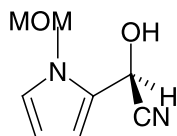
$[\alpha]_D^{25} = +35.7$ ($c = 1.2$, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



$C_8H_{10}N_2O_2$

(*R*)-2-Hydroxy-2-(2-(*N*-methoxymethyl)pyrrolyl)acetonitrile

E.e. = 81%

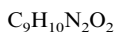
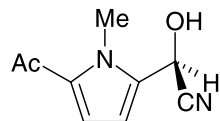
$[\alpha]_D^{25} = +104.9$ ($c = 0.7$, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

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Tetrahedron: Asymmetry 12 (2001) 3273



(*R*)-2-Hydroxy-2-(2-(5-acetyl-*N*-methyl)pyrrolyl)acetonitrile

E.e. = 34.1%

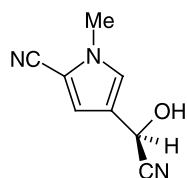
$[\alpha]_D^{21} = +38.8$ ($c=0.8$, EtOH)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



(*R*)-2-Hydroxy-2-(3-(5-cyano-*N*-methyl)pyrrolyl)acetonitrile

E.e. = 66.4%

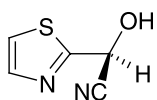
$[\alpha]_D^{21} = +24.7$ ($c=0.8$, EtOH)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



(*S*)-2-Hydroxy-2-(2-thiazolyl)acetonitrile

E.e. = 67%

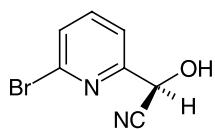
$[\alpha]_D^{21} = +13$ ($c=0.4$, EtOH)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*S*)

Peiran Chen, Shiqing Han, Guoqiang Lin,* Hao Huang and Zuyi Li

Tetrahedron: Asymmetry 12 (2001) 3273



(*R*)-2-Hydroxy-2-(6-bromo-2-pyridinyl)acetonitrile

E.e. = 65%

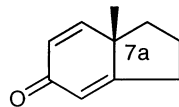
$[\alpha]_D^{21} = +22.4$ ($c=1.6$, $CHCl_3$)

Source of chirality: asymmetric synthesis catalyzed by (*R*)-HNL

Absolute configuration: (*R*)

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{10}H_{12}O$

(7a*S*)-Methyl-1,2,3,7a-tetrahydro-inden-5-one

E.e. = 70%

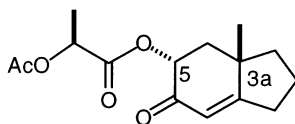
$[\alpha]_D -54$ (c 1.42, $CHCl_3$)

Source of chirality: (*R*)-(+)-1-phenylethylamine

Absolute configuration: 7a*S*

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{15}H_{20}O_5$

2-Acetoxy-propionic acid (3a*S*)-methyl-6-oxo-2,3,3a,4,5,6-hexahydro-1*H*-inden-(5*R*)-yl ester

E.e. $\geq 99\%$

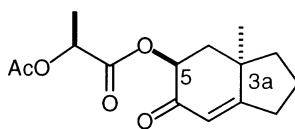
$[\alpha]_D +46$ (c 4.16, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{15}H_{20}O_5$

2-Acetoxy-propionic acid (3a*R*)-methyl-6-oxo-2,3,3a,4,5,6-hexahydro-1*H*-inden-(5*S*)-yl ester

E.e. $\geq 99\%$

Mp 68–69°C (heptane–ether)

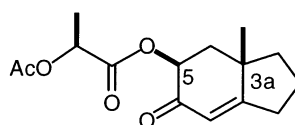
$[\alpha]_D -93$ (c 1.98, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

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José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{15}H_{20}O_5$

2-Acetoxy-propionic acid (3a*S*)-methyl-6-oxo-2,3,3a,4,5,6-hexahydro-1*H*-inden-(5*S*)-yl ester

E.e. $\geq 99\%$

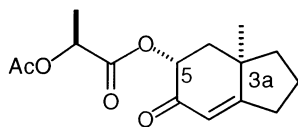
$[\alpha]_D +39$ (c 4.16, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{15}H_{20}O_5$

2-Acetoxy-propionic acid (3aR)-methyl-6-oxo-2,3,3a,4,5,6-hexahydro-1H-inden-(5R)-yl ester

E.e. $\geq 99\%$

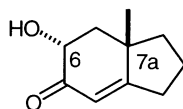
$[\alpha]_D -42$ (c 2.11, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 3aR,5R

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{10}H_{14}O_2$

(6R)-Hydroxy-(7aS)-methyl-1,2,3,6,7,7a-hexahydro-inden-5-one

E.e. $\geq 99\%$

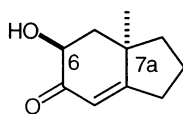
$[\alpha]_D +122$ (c 2.15, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 6R,7aS

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José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{10}H_{14}O_2$

(6S)-Hydroxy-(7aR)-methyl-1,2,3,6,7,7a-hexahydro-inden-5-one

E.e. $\geq 99\%$

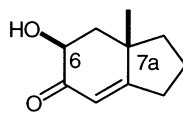
$[\alpha]_D -121$ (c 1.98, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 6S,7aR

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José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{10}H_{14}O_2$

(6S)-Hydroxy-(7aS)-methyl-1,2,3,6,7,7a-hexahydro-inden-5-one

E.e. $\geq 99\%$

Mp 71–73°C (heptane–ether)

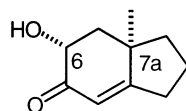
$[\alpha]_D +25$ (c 1.35, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 6S,7aS

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{10}H_{14}O_2$

(6*R*)-Hydroxy-(7*aR*)-methyl-1,2,3,6,7,7*a*-hexahydro-inden-5-one

E.e. $\geq 99\%$

Mp 71–73°C (heptane–ether)

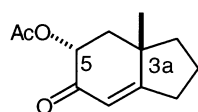
$[\alpha]_D -24$ (*c* 1.33, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 6*R*,7*aR*

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{12}H_{16}O_3$

Acetic acid (3*aS*)-methyl-6-oxo-2,3,3*a*,4,5,6-hexahydro-1*H*-inden-(5*R*)-yl ester

E.e. $\geq 99\%$

Mp 53–55°C (heptane–ether)

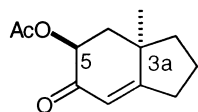
$[\alpha]_D +114$ (*c* 2.28, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{12}H_{16}O_3$

Acetic acid (3*aR*)-methyl-6-oxo-2,3,3*a*,4,5,6-hexahydro-1*H*-inden-(5*S*)-yl ester

E.e. $\geq 99\%$

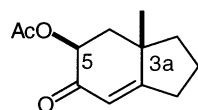
$[\alpha]_D -112$ (*c* 2.24, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{12}H_{16}O_3$

Acetic acid (3*aS*)-methyl-6-oxo-2,3,3*a*,4,5,6-hexahydro-1*H*-inden-(5*S*)-yl ester

E.e. $\geq 99\%$

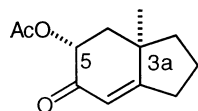
$[\alpha]_D +32$ (*c* 1.55, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

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

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



Acetic acid (3aR)-methyl-6-oxo-2,3,3a,4,5,6-hexahydro-1H-inden-(5R)-yl ester

E.e. $\geq 99\%$

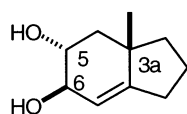
$[\alpha]_D -31$ (*c* 1.18, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 3aR,5R

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



(3aS)-Methyl-2,3,3a,4,5,6-hexahydro-1H-indene-(5R,6R)-diol

E.e. $\geq 99\%$

Mp 80–82°C (heptane–ether)

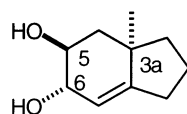
$[\alpha]_D +3$ (*c* 1.14, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 3aS,5R,6R

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



(3aR)-Methyl-2,3,3a,4,5,6-hexahydro-1H-indene-(5S,6S)-diol

E.e. $\geq 99\%$

Mp 80–82°C (heptane–ether)

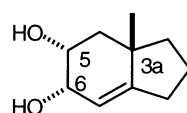
$[\alpha]_D -3$ (*c* 1.08, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 3aR,5S,6S

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



(3aS)-Methyl-2,3,3a,4,5,6-hexahydro-1H-indene-(5R,6S)-diol

E.e. $\geq 99\%$

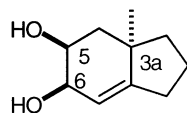
$[\alpha]_D +159$ (*c* 0.60, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 3aS,5R,6S

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



(3aR)-Methyl-2,3,3a,4,5,6-hexahydro-1H-indene-(5S,6R)-diol

E.e. $\geq 99\%$

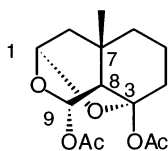
$[\alpha]_D -152$ (c 0.85, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetyllactyl chloride

Absolute configuration: 3aR,5S,6R

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



Acetic acid (9S)-acetoxy-(7S)-methyl-2,10-dioxo-tricyclo[5.3.1.0]undec-(3R)-yl ester

E.e. $\geq 99\%$

Mp 77–79°C (heptane–ether)

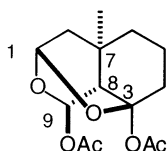
$[\alpha]_D -83$ (c 1.08, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetyllactyl chloride

Absolute configuration: 1R,3R,7S,8S,9S

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



Acetic acid (9R)-acetoxy-(7R)-methyl-2,10-dioxo-tricyclo[5.3.1.0]undec-(3S)-yl ester

E.e. $\geq 99\%$

Mp 77–79°C (heptane–ether)

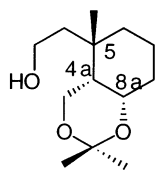
$[\alpha]_D +82$ (c 1.08, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetyllactyl chloride

Absolute configuration: 1S,3S,7R,8R,9R

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



2-(2,2,5-Trimethyl-hexahydro-benzo[1,3]dioxin-(5S)-yl)-ethanol

E.e. $\geq 99\%$

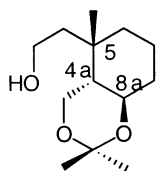
$[\alpha]_D +21$ (c 1.74, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetyllactyl chloride

Absolute configuration: 4aS,5S,8aS

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{13}H_{24}O_3$

2-(2,2,5-Trimethyl-hexahydro-benzo[1,3]dioxin-(5S)-yl)-ethanol

E.e. $\geq 99\%$

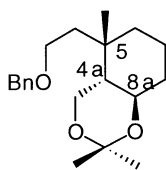
$[\alpha]_D +17$ (*c* 1.08, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 4*aS*,5*S*,8*aR*

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{20}H_{30}O_3$

5-(2-Benzyloxy-ethyl)-2,2,5-trimethyl-hexahydro-benzo[1,3]dioxine

E.e. $\geq 99\%$

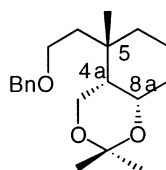
$[\alpha]_D +8$ (*c* 2.27, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 4*aS*,5*S*,8*aR*

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{20}H_{30}O_3$

5-(2-Benzyloxy-ethyl)-2,2,5-trimethyl-hexahydro-benzo[1,3]dioxine

E.e. $\geq 99\%$

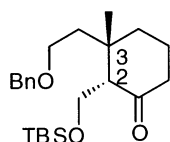
$[\alpha]_D +13$ (*c* 2.35, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 4*aS*,5*S*,8*aS*

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{23}H_{38}O_3Si$

3-(2-Benzyloxy-ethyl)-(2*R*)-(tert-butyl-dimethyl-silyloxymethyl)-(3*S*)-methyl-cyclohexanone

E.e. $\geq 99\%$

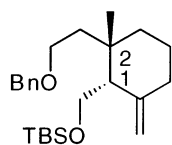
$[\alpha]_D -22$ (*c* 2.43, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetylacetyl chloride

Absolute configuration: 2*R*,3*S*

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Tetrahedron: Asymmetry 12 (2001) 3281



$C_{24}H_{40}O_2Si$

[2-(2-Benzyloxy-ethyl)-(2S)-methyl-6-methylene-(1S)-cyclohexylmethoxy]-tert-butyl-dimethyl-silane

E.e. $\geq 99\%$

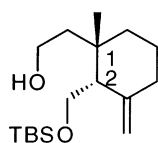
$[\alpha]_D -18$ (c 2.25, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 1S,2S

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José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{17}H_{34}O_2Si$

(2S)-[2-(tert-Butyl-dimethyl-silanyloxymethyl)-(1S)-methyl-3-methylene-cyclohexyl]-ethanol

E.e. $\geq 99\%$

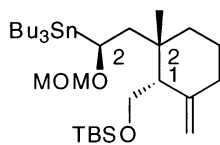
$[\alpha]_D -36$ (c 1.36, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 1S,2S

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{31}H_{64}O_3SiSn$

tert-Butyl-[(2S)-[(2S)-methoxymethoxy-(2S)-(tributyl-stannanyl)-ethyl]-(2S)-methyl-6-methylene-(1S)-cyclohexylmethoxy]-dimethyl-silane

E.e. $\geq 99\%$

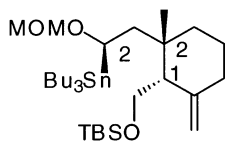
$[\alpha]_D +19$ (c 1.82, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 1S,2S,2S

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{31}H_{64}O_3SiSn$

tert-Butyl-[(2S)-[(2R)-methoxymethoxy-(2R)-(tributyl-stannanyl)-ethyl]-(2S)-methyl-6-methylene-(1S)-cyclohexylmethoxy]-dimethyl-silane

E.e. $\geq 99\%$

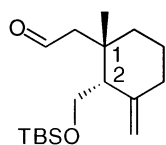
$[\alpha]_D -64$ (c 2.30, $CHCl_3$)

Source of chirality: resolution with (S)-O-acetylacetyl chloride

Absolute configuration: 1S,2S,2R

José I. Candela Lena, Maria del R. Rico Ferreira,
José I. Martín Hernando and Siméon Arseniyadis*

Tetrahedron: Asymmetry 12 (2001) 3281



$C_{17}H_{32}O_2Si$

[(2*S*)-(tert-Butyl-dimethyl-silyloxymethyl)-(1*S*)-methyl-3-methylene-cyclohexyl]-acetaldehyde

E.e. $\geq 99\%$

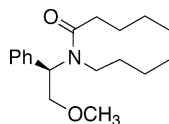
$[\alpha]_D -16$ (c 1.36, $CHCl_3$)

Source of chirality: resolution with (*S*)-*O*-acetyl-lactyl chloride

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

Yoshinosuke Usuki,* Hiroyuki Hirakawa, Kimihiko Goto
and Hideo Iio

Tetrahedron: Asymmetry 12 (2001) 3293



$C_{18}H_{27}NO_2$

(1'*R*)-1-(2'-Methoxy-1'-phenylethyl)azacyclodecan-2-one

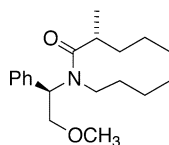
$[\alpha]_D = -55.5$ (c 1.25, MeOH)

Source of chirality: (*R*)-(-)-1-amino-1-phenyl-2-methoxyethane

Absolute configuration: 1'*R*

Yoshinosuke Usuki,* Hiroyuki Hirakawa, Kimihiko Goto
and Hideo Iio

Tetrahedron: Asymmetry 12 (2001) 3293



$C_{19}H_{29}NO_2$

(1'*R*,3*R*)-1-(2'-Methoxy-1'-phenylethyl)-3-methylaza-cyclodecan-2-one

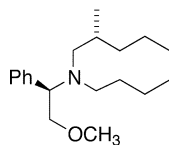
$[\alpha]_D = -45.4$ (c 0.625, MeOH)

Source of chirality: (*R*)-(-)-1-amino-1-phenyl-2-methoxyethane

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

Yoshinosuke Usuki,* Hiroyuki Hirakawa, Kimihiko Goto
and Hideo Iio

Tetrahedron: Asymmetry 12 (2001) 3293



$C_{19}H_{31}NO$

(1'*R*,3*R*)-1-(2'-Methoxy-1'-phenylethyl)-3-methylazacyclodecane

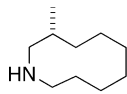
$[\alpha]_D = +43.8$ (c 0.99, MeOH)

Source of chirality: (*R*)-(-)-1-amino-1-phenyl-2-methoxyethane

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

Yoshinosuke Usuki,* Hiroyuki Hirakawa, Kimihiko Goto and Hideo Iio

Tetrahedron: Asymmetry 12 (2001) 3293



$C_{10}H_{21}N$

(3*R*)-3-Methylazacyclodecane

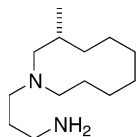
$[\alpha]_D^{25} = +17.4$ ($c = 0.205$, MeOH)

Source of chirality: (*R*)-(-)-1-amino-1-phenyl-2-methoxyethane

Absolute configuration: 3*R*

Yoshinosuke Usuki,* Hiroyuki Hirakawa, Kimihiko Goto and Hideo Iio

Tetrahedron: Asymmetry 12 (2001) 3293



$C_{13}H_{28}N_2$

(3*R*)-1-(3'-Aminopropyl)-3-methylazacyclodecane

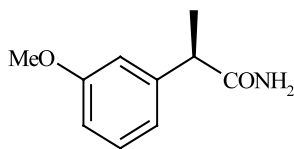
$[\alpha]_D^{25} = +74.6$ ($c = 0.925$, MeOH)

Source of chirality: (*R*)-(-)-1-amino-1-phenyl-2-methoxyethane

Absolute configuration: 3*R*

Zhong-Liu Wu and Zu-Yi Li*

Tetrahedron: Asymmetry 12 (2001) 3305



$C_{10}H_{13}NO_2$

(*R*)-(-)-2-(3'-Methoxyphenyl)propionamide

E.e. >99%

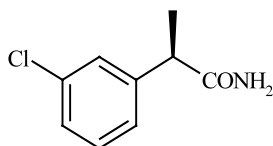
$[\alpha]_D^{18} = -46.4$ ($c = 1.7$, $CHCl_3$)

Source of chirality: *Rhodococcus* sp. CGMCC 0497-catalyzed enantioselective hydrolysis of the corresponding nitrile

Absolute configuration: *R*

Zhong-Liu Wu and Zu-Yi Li*

Tetrahedron: Asymmetry 12 (2001) 3305



$C_9H_{10}ClNO$

(*R*)-(-)-2-(3'-Chlorophenyl)propionamide

E.e. >99%

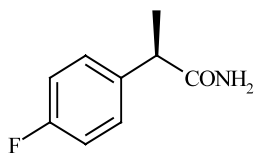
$[\alpha]_D^{18} = -48.3$ ($c = 1.25$, $CHCl_3$)

Source of chirality: *Rhodococcus* sp. CGMCC 0497-catalyzed enantioselective hydrolysis of the corresponding nitrile

Absolute configuration: *R*

Zhong-Liu Wu and Zu-Yi Li*

Tetrahedron: Asymmetry 12 (2001) 3305



C₉H₁₀FNO

(*R*)-(-)-2-(4'-Fluorophenyl)propionamide

E.e. >99%

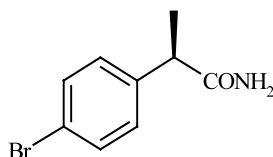
$[\alpha]_D^{18} = -44.5$ (*c* 1.2, CHCl₃)

Source of chirality: *Rhodococcus* sp. CGMCC 0497-catalyzed enantioselective hydrolysis of the corresponding nitrile

Absolute configuration: *R*

Zhong-Liu Wu and Zu-Yi Li*

Tetrahedron: Asymmetry 12 (2001) 3305



C₉H₁₀BrNO

(*R*)-(-)-2-(4'-Bromophenyl)propionamide

E.e. >98%

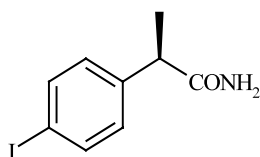
$[\alpha]_D^{18} = -53.6$ (*c* 2.0, CHCl₃)

Source of chirality: *Rhodococcus* sp. CGMCC 0497-catalyzed enantioselective hydrolysis of the corresponding nitrile

Absolute configuration: *R*

Zhong-Liu Wu and Zu-Yi Li*

Tetrahedron: Asymmetry 12 (2001) 3305



C₉H₁₀I NO

(*R*)-(-)-2-(4'-Iodophenyl)propionamide

E.e. >99%

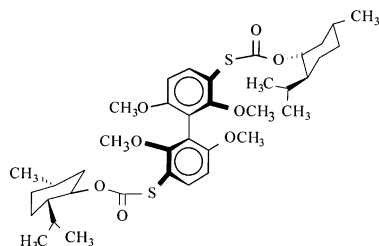
$[\alpha]_D^{18} = -39.8$ (*c* 0.25, CHCl₃)

Source of chirality: *Rhodococcus* sp. CGMCC 0497-catalyzed enantioselective hydrolysis of the corresponding nitrile

Absolute configuration: *R*

Giovanna Delogu,* Davide Fabbri, Maria Antonietta Dettori, Giuseppe Capozzi, Stefano Menichetti* and Cristina Nativi

Tetrahedron: Asymmetry 12 (2001) 3313



(*aR,1R,1'R,2S,2'S,5R,5'R*)-[2,2',6,6'-Tetramethoxy-1,1'-biphenyl]-3,3'-diyl-*S,S'*-bis[5-methyl-2-(1-methylethyl)-cyclohexyl]-carbonic ester

E.e. 94% de [by ¹H NMR]

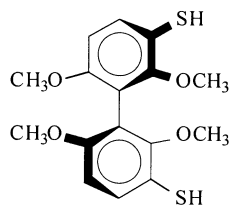
$[\alpha]_D^{20} = -79.6$ (*c* 0.3, CHCl₃)

Source of chirality: (-)-(1*R,2S,5R*)-methyl chloroformate (ee 99%)

Absolute configuration: *aR*

Giovanna Delogu,* Davide Fabbri, Maria Antonietta Dettori,
Giuseppe Capozzi, Stefano Menichetti* and Cristina Nativi

Tetrahedron: Asymmetry 12 (2001) 3313



(*R*)-(-)-2,2',6,6'-Tetramethoxy-3,3'-dimercapto-1,1'-biphenyl

E.e. 94% ee [by ^1H NMR of the corresponding diastereomer]

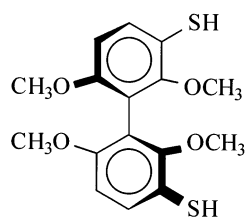
$[\alpha]_{\text{D}}^{20} = -28.9$ (*c* 0.4, CHCl_3)

Source of chirality: resolution

Absolute configuration: *R*

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Giuseppe Capozzi, Stefano Menichetti* and Cristina Nativi

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(*S*)-(+)-2,2',6,6'-Tetramethoxy-3,3'-dimercapto-1,1'-biphenyl

E.e. 76% ee [by ^1H NMR of the corresponding diastereomer, by chiral HPLC of the corresponding dithiomethyl derivative]

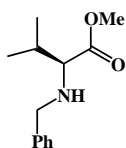
$[\alpha]_{\text{D}}^{20} = +23.6$ (*c* 1, CHCl_3)

Source of chirality: resolution

Absolute configuration: *S*

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$\text{C}_{13}\text{H}_{19}\text{NO}_2$

(*S*)-*N*-Benzylvaline methyl ester

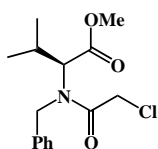
$[\alpha]_{\text{D}} -53.9$ (*c* 1.03, CHCl_3)

Source of chirality: L-valine

Absolute configuration: *S*

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$\text{C}_{15}\text{H}_{20}\text{NO}_3\text{Cl}$

(*S*)-*N*-Benzyl-*N*-chloroacetylvaline methyl ester

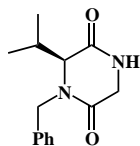
$[\alpha]_{\text{D}} -78.8$ (*c* 1.06, CHCl_3)

Source of chirality: L-valine

Absolute configuration: *S*

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(2*S*)-1-*N*-Benzyl-2-isopropylpiperazine-3,6-dione

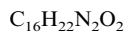
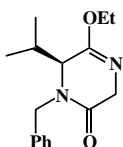
$[\alpha]_D +10.8$ (*c* 1.012, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 2*S*

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(6*S*)-1-*N*-Benzyl-5-ethoxy-3,6-dihydro-6-isopropylpyrazine-2-one

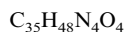
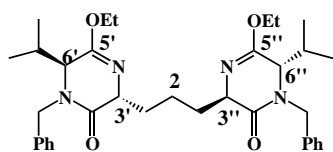
$[\alpha]_D +68$ (*c* 1.01, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 6*S*

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1-[(3'*R*,6'*S*)-1'-Benzyl-5'-ethoxy-3',6'-dihydro-6'-isopropylpyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

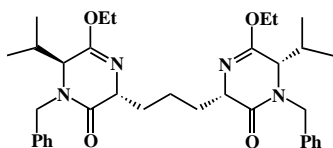
$[\alpha]_D +41.6$ (*c* 1, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

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1-[(3'*R*,6'*S*)-1'-Benzyl-5'-ethoxy-3',6'-dihydro-6'-isopropylpyrazin-3'-yl-2'-one]-3-[(3''*S*,6''*S*)-1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

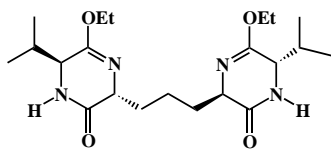
$[\alpha]_D -20$ (*c* 1.014, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*S*,6''*S* assigned by 1H NMR

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$C_{21}H_{36}N_4O_4$

1-[(3'*R*,6'*S*)-5'-Ethoxy-3',6'-dihydro-6'-isopropyl-1'*H*-pyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-5''-ethoxy-3'',6''-dihydro-6''-isopropyl-1''*H*-pyrazin-3''-yl-2''-one]propane

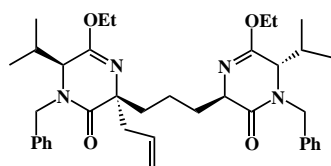
$[\alpha]_D +108$ (*c* 1, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*S*,6''*S* assigned by 1H NMR

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$C_{38}H_{52}N_4O_4$

1-[(3'*R*,6'*S*)-3'-Allyl-1'-benzyl-5'-ethoxy-6'-hydro-6'-isopropylpyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

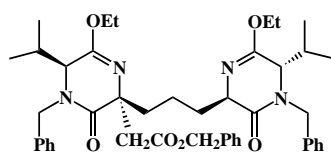
$[\alpha]_D -10.7$ (*c* 1, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

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$C_{44}H_{56}N_4O_4$

1-[(3'*R*,6'*S*)-1'-Benzyl-3'-benzyloxyacetyl-5'-ethoxy-6'-hydro-6'-isopropylpyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

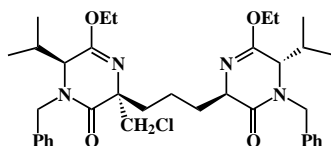
$[\alpha]_D -3.1$ (*c* 1.014, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

Francesca Paradisi,* Gianni Porzi and Sergio Sandri*

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$C_{36}H_{49}ClN_4O_4$

1-[(3'*R*,6'*S*)-1'-Benzyl-3'-chloromethyl-5'-ethoxy-6'-isopropylpyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

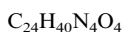
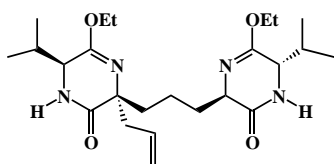
$[\alpha]_D -5.3$ (*c* 1, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

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1-[(3'*R*,6'*S*)-3'-Allyl-5'-ethoxy-6'-hydro-6'-isopropyl-1'*H*-pyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-5''-ethoxy-3'',6''-dihydro-6''-isopropyl-1''*H*-pyrazin-3''-yl-2''-one]propane

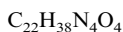
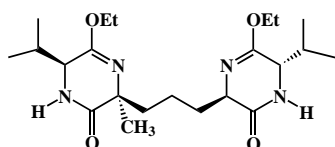
$[\alpha]_D +94.3$ (*c* 1, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

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1-[(3'*S*,6'*S*)-5'-Ethoxy-6'-hydro-6'-isopropyl-3'-methyl-1'*H*-pyrazin-3'-yl-2'-one]-3-[(3''*R*,6''*S*)-5''-ethoxy-3'',6''-dihydro-6''-isopropyl-1''*H*-pyrazin-3''-yl-2''-one]propane

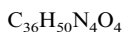
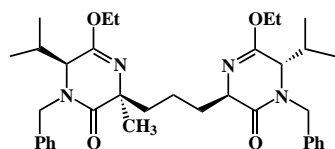
$[\alpha]_D +58.3$ (*c* 1.01, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*S*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

Francesca Paradisi,* Gianni Porzi and Sergio Sandri*

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1-[(3'*S*,6'*S*,3''*R*,6''*S*)-1'-Benzyl-5'-ethoxy-6'-hydro-6'-isopropyl-3'-methylpyrazin-3'-yl-2'-one]-3-[1''-benzyl-5''-ethoxy-3'',6''-dihydro-6''-isopropylpyrazin-3''-yl-2''-one]propane

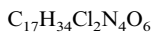
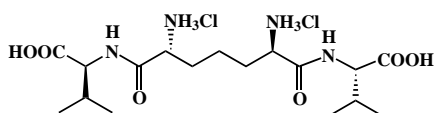
$[\alpha]_D +9.1$ (*c* 0.316, $CHCl_3$)

Source of chirality: L-valine

Absolute configuration: 3'*R*,6'*S*,3''*R*,6''*S* assigned by 1H NMR

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Tripeptide [(HO)Val-(2*R*,6*R*)-DAP-Val(OH)]·2HCl

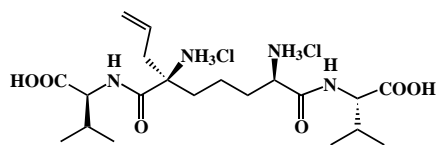
$[\alpha]_D -56.7$ (*c* 1.014, H_2O)

Source of chirality: L-valine

Absolute configuration: 2*R*,6*R* assigned by 1H NMR

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Tripeptide [(HO)Val-(2*R*,6*R*)-2-allyl-2,6-DAP-Val(OH)]·2HCl

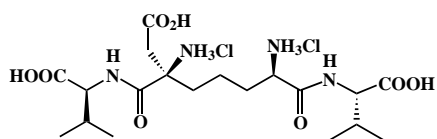
$[\alpha]_{\text{D}} -26.1$ (*c* 0.6, 1N HCl)

Source of chirality: L-valine

Absolute configuration: 2*R*,6*R* assigned by ^1H NMR

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Tripeptide [(HO)Val-(2*R*,6*R*)-2-carboxymethylen-2,6-DAP-Val(OH)]·2HCl

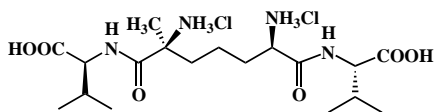
$[\alpha]_{\text{D}} -41$ (*c* 1.16, 1N HCl)

Source of chirality: L-valine

Absolute configuration: 2*R*,6*R* assigned by ^1H NMR

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Tripeptide [(HO)Val-(2*R*,6*R*)-2-methyl-2,6-DAP-Val(OH)]·2HCl

$[\alpha]_{\text{D}} -29.5$ (*c* 0.51, 1N HCl)

Source of chirality: L-valine

Absolute configuration: 2*R*,6*R* assigned by ^1H NMR