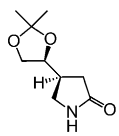
Stereochemistry abstracts

Jorge L. O. Domingos, Evanoel C. Lima, Ayres G. Dias* and Paulo R. R. Costa*

Tetrahedron: Asymmetry *15 (2004) 2313*



$C_9H_{15}NO_3$

(4*S*)-4-[(*S*)-2,2-Dimethyl-1,3-dioxolan-4-yl]-pyrrolidin-2-one

$[\alpha]_D^{25} = -11.0$ (*c* 1.26, $CHCl_3$)

Source of chirality: D-(+)-mannitol

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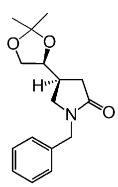

$C_{16}H_{21}NO_3$

N-Benzyl-(4*S*)-4-[(*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-pyrrolidin-2-one

$[\alpha]_D^{25} = -4.4$ (*c* 2.00, $CHCl_3$)

Source of chirality: D-(+)-mannitol

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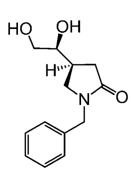

$C_{13}H_{17}NO_3$

N-Benzyl-(4*S*)-4-[(1′*S*)-1′,2′-dihydroxyethyl]-pyrrolidin-2-one

$[\alpha]_D^{25} = -15.0$ (*c* 2.10, $CHCl_3$)

Source of chirality: D-(+)-mannitol

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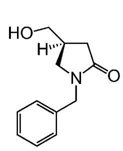

$C_{12}H_{15}NO_2$

N-Benzyl-(4*S*)-4-hydroxymethyl pyrrolidin-2-one

$[\alpha]_D^{25} = -10.1$ (*c* 1.00, $CHCl_3$)

Source of chirality: D-(+)-mannitol

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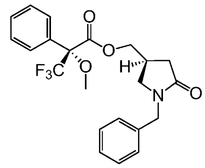
Tetrahedron: Asymmetry *15 (2004) 2313*



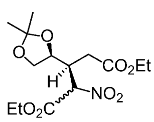
$[\alpha]_D^{25} = +24.65$ (*c* 0.64, $CHCl_3$)
Source of chirality: D-(+)-mannitol

$C_{22}H_{22}F_3NO_4$

(2*R*,4′*S*)-(4′-(*N*-Benzyl) pyrrolidin-2-one)-methyl-2-methoxy-2-trifluoromethylphenyl acetate

Jorge L. O. Domingos, Evanoel C. Lima, Ayres G. Dias* and Paulo R. R. Costa*

Tetrahedron: Asymmetry *15 (2004) 2313*



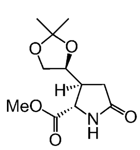
$[\alpha]_D^{25} = +17.2$ (*c* 2.00, $CHCl_3$)
Source of chirality: D-(+)-mannitol

$C_{14}H_{23}NO_8$

Ethyl (3*S*,4*S*)-3-(α-nitro-carboxyethyl)-methyl-4,5-*O*-isopropilidenepentenoate

Jorge L. O. Domingos, Evanoel C. Lima, Ayres G. Dias* and Paulo R. R. Costa*

Tetrahedron: Asymmetry *15 (2004) 2313*



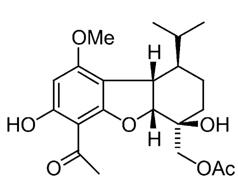
$[\alpha]_D^{25} = -112.5$ (*c* 0.66, $CHCl_3$)
Source of chirality: D-(+)-mannitol

$C_{11}H_{17}NO_5$

Methyl-(4*S*,5*S*)-4-[(*S*)-2,2-dimethyl-1,3-dioxolan-4-yl]-pyrrolidin-2-one 5-carboxylate

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



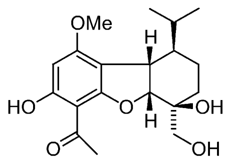
Ee = 100%
$[\alpha]_D^{33} = -97.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: (5a*R*,6*S*,9*R*,9a*S*)

$C_{21}H_{28}O_7$

(5a*R*,6*S*,9*R*,9a*S*)-6-Acetoxymethyl-4-acetyl-3,6-dihydroxy-1-methoxy-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



$C_{19}H_{26}O_6$

Ee = 100%

$[\alpha]_D^{33} = -97.2$ (*c* 1.0, $CHCl_3$)

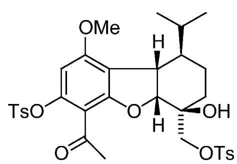
Source of chirality: transformation from an enantiomerically pure product

Absolute configuration: (5a*R*,6*S*,9*R*,9a*S*)

(5a*R*,6*S*,9*R*,9a*S*)-4-Acetyl-3,6-dihydroxy-6-hydroxymethyl-1-methoxy-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



$C_{33}H_{38}O_{10}S_2$

Ee = 100%

$[\alpha]_D^{30} = -54.8$ (*c* 1.0, $CHCl_3$)

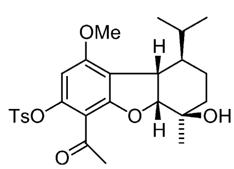
Source of chirality: transformation from an enantiomerically pure product

Absolute configuration: (5a*R*,6*S*,9*R*,9a*S*)

(5a*R*,6*S*,9*R*,9a*S*)-4-Acetyl-6-hydroxy-1-methoxy-9-(1-methylethyl)-3-tosyloxy-6-tosyloxymethyl-5a,6,7,8,9,9a-hexahydrodibenzofuran

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



$C_{26}H_{32}O_7S$

Ee = 100%

$[\alpha]_D^{29} = -46.6$ (*c* 1.0, $CHCl_3$)

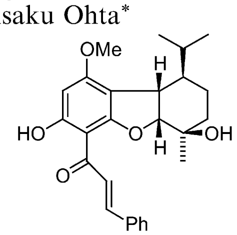
Source of chirality: transformation from an enantiomerically pure product

Absolute configuration: (5a*R*,6*R*,9*R*,9a*S*)

(5a*R*,6*R*,9*R*,9a*S*)-4-Acetyl-6-hydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-3-tosyloxy-5a,6,7,8,9,9a-hexahydrodibenzofuran

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



$C_{26}H_{30}O_5$

Ee = 100%

$[\alpha]_D^{29} = -32.8$ (*c* 1.0, $CHCl_3$)

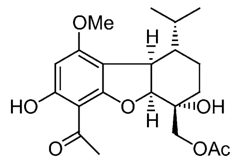
Source of chirality: transformation from an enantiomerically pure product

Absolute configuration: (5a*R*,6*R*,9*R*,9a*S*)

(5a*R*,6*R*,9*R*,9a*S*)-4-Cinnamoyl-3,6-dihydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran [(−)-Linderol A]

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



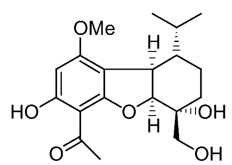
$C_{21}H_{28}O_7$

(5a*S*,6*R*,9*S*,9a*R*)-6-Acetoxymethyl-4-acetyl-3,6-dihydroxy-1-methoxy-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran

Ee = 100%
$[\alpha]_D^{33} = +101.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: resolution
Absolute configuration: (5a*S*,6*R*,9*S*,9a*R*)

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



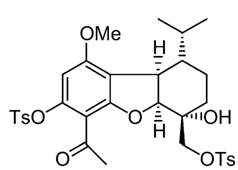
$C_{19}H_{26}O_6$

(5a*S*,6*R*,9*S*,9a*R*)-4-Acetyl-3,6-dihydroxy-6-hydroxymethyl-1-methoxy-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran

Ee = 100%
$[\alpha]_D^{32} = +99.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: transformation from an enantiomerically pure product
Absolute configuration: (5a*S*,6*R*,9*S*,9a*R*)

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



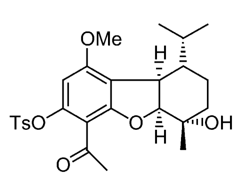
$C_{33}H_{38}O_{10}S_2$

(5a*S*,6*R*,9*S*,9a*R*)-4-Acetyl-6-hydroxy-1-methoxy-9-(1-methylethyl)-3-tosyloxy-6-tosyloxymethyl-5a,6,7,8,9,9a-hexahydrodibenzofuran

Ee = 100%
$[\alpha]_D^{28} = +55.7$ (*c* 2.0, $CHCl_3$)
Source of chirality: transformation from an enantiomerically pure product
Absolute configuration: (5a*S*,6*R*,9*S*,9a*R*)

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



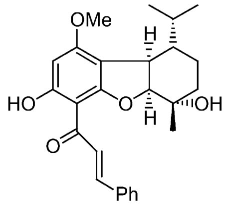
$C_{26}H_{32}O_7S$

(5a*S*,6*S*,9*S*,9a*R*)-4-Acetyl-6-hydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-3-tosyloxy-5a,6,7,8,9,9a-hexahydrodibenzofuran

Ee = 100%
$[\alpha]_D^{28} = +48.0$ (*c* 1.3, $CHCl_3$)
Source of chirality: transformation from an enantiomerically pure product
Absolute configuration: (5a*S*,6*S*,9*S*,9a*R*)

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



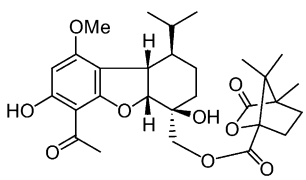
$C_{26}H_{30}O_5$

(5a*S*,6*S*,9*S*,9a*R*)-4-Cinnamoyl-3,6-dihydroxy-1-methoxy-6-methyl-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran [(+)-linderol A]

Ee = 100%
$[\alpha]_D^{29}$ = +33.0 (*c* 1.0, $CHCl_3$)
Source of chirality: transformation from an enantiomerically pure product
Absolute configuration: (5a*S*,6*S*,9*S*,9a*R*)

Masayuki Yamashita, Takashi Shimizu, Ikuo Kawasaki and Shunsaku Ohta*

Tetrahedron: Asymmetry *15 (2004) 2315*



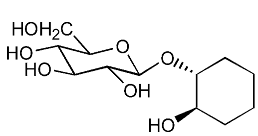
$C_{29}H_{38}O_9$

(5a*R*,6*S*,9*R*,9a*S*)-4-Acetyl-6-[(1*S*)-camphanoyloxymethyl]-3,6-dihydroxy-1-methoxy-9-(1-methylethyl)-5a,6,7,8,9,9a-hexahydrodibenzofuran

Ee = 100%
$[\alpha]_D^{25}$ = −117.0 (*c* 0.79, $CHCl_3$)
Source of chirality: transformation from an enantiomerically pure product
Absolute configuration: (5a*R*,6*S*,9*R*,9a*S*), (1*S*,4*R*)

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2319*



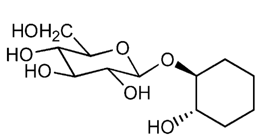
$C_{12}H_{22}O_7$

(1*R*,2*R*)-2-Hydroxycyclohexyl b-D-glucopyranoside

De >99%
$[\alpha]_D^{25}$ = −15 (*c* 0.20, MeOH)
Source of chirality: enantioselective glucosylation with glucosyltransferase from *Catharanthus roseus*
Absolute configuration: 1*R*,2*R*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2319*



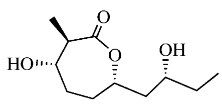
$C_{12}H_{22}O_7$

(1*S*,2*S*)-2-Hydroxycyclohexyl b-D-glucopyranoside

De >99%
$[\alpha]_D^{25}$ = −23 (*c* 0.18, MeOH)
Source of chirality: enantioselective glucosylation with glucosyltransferase from *Nicotiana tabacum*
Absolute configuration: 1*S*,2*S*

G. V. M. Sharma* and K. Raman Kumar

Tetrahedron: Asymmetry *15 (2004) 2323*



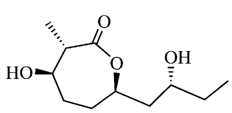
$C_{11}H_{20}O_4$

4-Hydroxy-7-[2-hydroxy-(2*R*)-butyl]-3-methyl-(3*R*,4*S*,7*S*)-oxepan-2-one

$[\alpha]_D$ = −39.1 (*c* 0.23, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*R*,4*S*,7*S*)

G. V. M. Sharma* and K. Raman Kumar

Tetrahedron: Asymmetry *15 (2004) 2323*



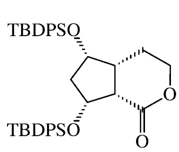
$C_{11}H_{20}O_4$

4-Hydroxy-7-[2-hydroxy-(2*R*)-butyl]-3-methyl-(3*S*,4*R*,7*R*)-oxepan-2-one

$[\alpha]_D$ = −70.0 (*c* 0.25, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (2*R*,3*S*,4*R*,7*R*)

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

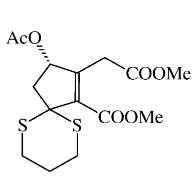


Ee >99%
$[\alpha]_D$ = −15.1 (*c* 0.67, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (1*S*,6*R*,7*S*,9*R*)

(1*S*,6*R*,7*S*,9*R*)-7,9-Bis(*tert*-butyldiphenylsilyloxy)-3-oxabicyclo[4,3,0]nonan-2-one

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

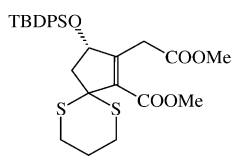


$[\alpha]_D$ = −14.1 (*c* 6.0, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (9*S*)

(9*S*)-9-Acetoxy-7-methoxycarbonyl-8-methoxycarbonylmethyl-1,5-dithiaspiro[5,4]dec-7-ene

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

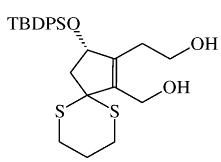


$[\alpha]_D = -6.5$ (c 3.0, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (9*S*)

(9*S*)-9-(*tert*-Butyldiphenylsilyloxy)-7-methoxycarbonyl-8-methoxycarbonylmethyl-1,5-dithiaspiro[5,4]dec-7-ene

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

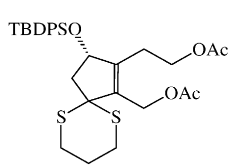


$[\alpha]_D = +18.0$ (c 3.2, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (9*S*)

(9*S*)-9-(*tert*-Butyldiphenylsilyloxy)-8-(2-hydroxyethyl)-7-hydroxymethyl-1,5-dithiaspiro[5,4]dec-7-ene

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

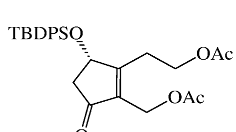


$[\alpha]_D = +13.2$ (c 2.5, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (9*S*)

(9*S*)-9-(*tert*-Butyldiphenylsilyloxy)-8-(2-acetoxyethyl)-7-acetoxymethyl-1,5-dithiaspiro[5,4]dec-7-ene

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

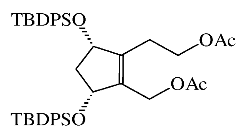


$[\alpha]_D = +19.5$ (c 0.84, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (4*S*)

(4*S*)-3-(2-Acetoxyethyl)-2-acetoxymethyl-4-(*tert*-butyldiphenylsilyloxy)-2-cyclopenten-1-one

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

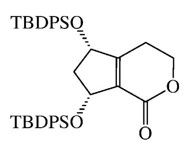


$[\alpha]_D = -7.4$ (c 0.82, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (1*R*,4*S*)

(1*R*,4*S*)-3-(2-Acetoxyethyl)-2-acetoxymethyl-1,4-bis(*tert*-butyldiphenylsilyloxy)-2-cyclopenten

Xiao-Xin Shi,* Wei He, Qing-Quan Wu, Jie Yin, Feng Ni and Xiao-Zhou Jin

Tetrahedron: Asymmetry *15 (2004) 2327*

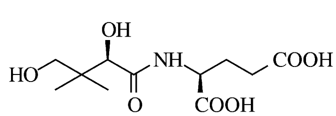


$[\alpha]_D = -10.2$ (c 0.53, CH_2Cl_2)
Source of chirality: L-malic acid
Absolute configuration: (7*S*,9*R*)

(7*S*,9*R*)-7,9-Bis(*tert*-butyldiphenylsilyloxy)-3-oxabicyclo[4,3,0]non-1-en-2-one

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*

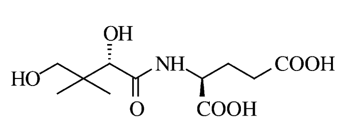


$C_{11}H_{19}NO_7$
N-((2′*R*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-glutamic acid

De = 90.1%
$[\alpha]_D^{26} = -6.9$ (c 1.00, H_2O)
Source of chirality: (*R*)-pantolactone, L-glutamic acid
Absolute configuration: (2′*R*,2*S*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*

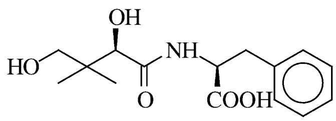


$C_{11}H_{19}NO_7$
N-((2′*S*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-glutamic acid

De = 96.7%
$[\alpha]_D^{26} = -45.7$ (c 1.00, H_2O)
Source of chirality: (*S*)-pantolactone, L-glutamic acid
Absolute configuration: (2′*S*,2*S*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*



$C_{15}H_{21}NO_5$

N-((2′*R*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-phenylalanine

De = 99.2%

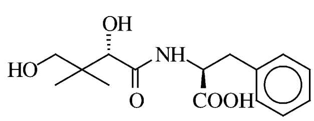
$[\alpha]_D^{26} = +10.4$ (*c* 1.00, H_2O)

Source of chirality: (*R*)-pantolactone, L-phenylalanine

Absolute configuration: (2′*R*,2*S*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*



$C_{15}H_{21}NO_5$

N-((2′*S*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-phenylalanine

De = 96.2%

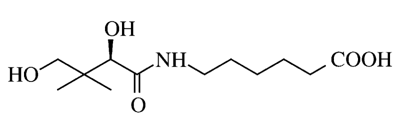
$[\alpha]_D^{26} = -9.0$ (*c* 1.00, H_2O)

Source of chirality: (*S*)-pantolactone, L-phenylalanine

Absolute configuration: (2′*S*,2*S*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*



$C_{12}H_{23}NO_5$

N-((2′*R*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-6-aminohexanoic acid

Ee = 96.8%

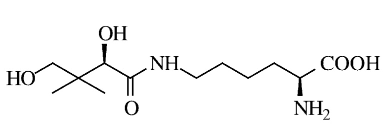
$[\alpha]_D^{26} = +16.9$ (*c* 1.00, H_2O)

Source of chirality: (*R*)-pantolactone

Absolute configuration: (*R*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*



$C_{12}H_{24}N_2O_5$

N^6-((2′*R*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-lysine

De = 99.4%

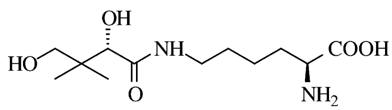
$[\alpha]_D^{26} = +24.2$ (*c* 1.00, H_2O)

Source of chirality: (*R*)-pantolactone, L-lysine

Absolute configuration: (2′*R*,2*S*)

Marek Włostowski, Tomasz Rowicki and Ludwik Synoradzki*

Tetrahedron: Asymmetry *15 (2004) 2333*



$C_{12}H_{24}N_2O_5$

N^6-((2′*S*)-2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)-L-lysine

De = 99.0%

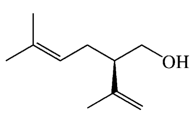
$[\alpha]_D^{26} = -17.3$ (*c* 1.00, H_2O)

Source of chirality: (*S*)-pantolactone, L-lysine

Absolute configuration: (2′*S*,2*S*)

Anat Zada* and Miriam Harel

Tetrahedron: Asymmetry *15 (2004) 2339*



$C_{10}H_{18}O$

(*R*)-Lavandulol

Ee = 96.75%

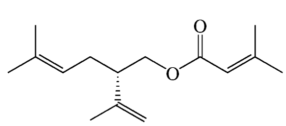
$[\alpha]_D^{25} = -9.6$ (*c* 1.0, MeOH)

Source of chirality: enzymatic trans-esterification

Absolute configuration: (*R*)

Anat Zada* and Miriam Harel

Tetrahedron: Asymmetry *15 (2004) 2339*



$C_{15}H_{24}O_2$

(*S*)-Lavandulyl senecioate

Ee = 92.6%

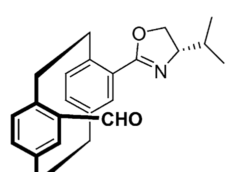
$[\alpha]_D^{25} = +9.1$ (*c* 0.99, hexane)

Source of chirality: enzymatic trans-esterification

Absolute configuration: (*S*)

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{23}H_{25}NO_2$

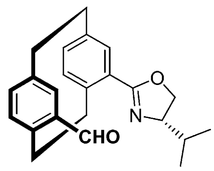
(*S*,4*Rp*,13*Sp*)-4-Formyl-13-(4-*iso*-propyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = -62.3$ (*c* 0.45, $CHCl_3$)

Source of chirality: (*S*)-valinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{23}H_{25}NO_2$

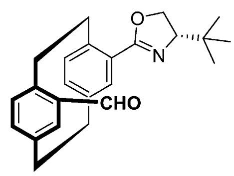
(*S*,4*Sp*,13*Rp*)-4-Formyl-13-(4-*iso*-propyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = +59.6$ (*c* 0.545, $CHCl_3$)

Source of chirality: (*S*)-valinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{24}H_{27}NO_2$

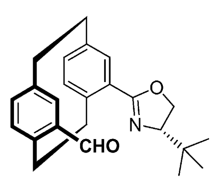
(*S*,4*Rp*,13*Sp*)-4-Formyl-13-(4-*tert*-butyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = -34.6$ (*c* 0.36, $CHCl_3$)

Source of chirality: (*S*)-*tert*-leucinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{24}H_{27}NO_2$

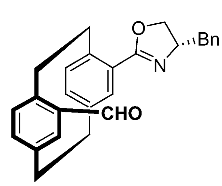
(*S*,4*Sp*,13*Rp*)-4-Formyl-13-(4-*tert*-butyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = +186$ (*c* 0.33, $CHCl_3$)

Source of chirality: (*S*)-*tert*-leucinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{27}H_{25}NO_2$

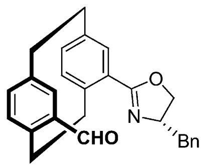
(*S*,4*Rp*,13*Sp*)-4-Formyl-13-(4-benzyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = -19.0$ (*c* 0.30, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{27}H_{25}NO_2$

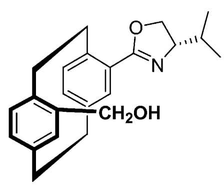
(*S*,4*Sp*,13*Rp*)-4-Formyl-13-(4-benzyl-oxazolin-2-yl)[2.2]paracyclophane

$[\alpha]_D^{20} = +41.7$ (*c* 0.36, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{23}H_{27}NO_2$

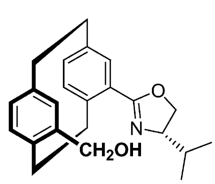
(*S*,4*Sp*,13*Rp*)-4-(4-*iso*-Propyl-oxazoline-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = -32.5$ (*c* 0.325, $CHCl_3$)

Source of chirality: (*S*)-valinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{23}H_{27}NO_2$

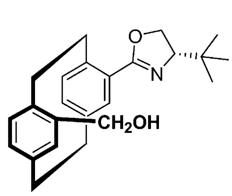
(*S*,4*Rp*,13*Sp*)-4-(4-*iso*-Propyl-oxazoline-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = -123.9$ (*c* 0.355, $CHCl_3$)

Source of chirality: (*S*)-valinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{24}H_{29}NO_2$

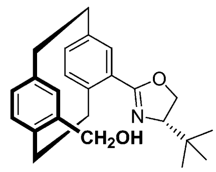
(*S*,4*Rp*,13*Sp*)-4-(4-*tert*-Butyl-oxazoline-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = +99.2$ (*c* 0.370, $CHCl_3$)

Source of chirality: (*S*)-*tert*-leucinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{24}H_{29}NO_2$

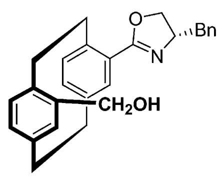
(*S*,4*Sp*,13*Rp*)-4-(4-*tert*-Butyl-oxazoline-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = -103.9$ (c 0.425, $CHCl_3$)

Source of chirality: (*S*)-*tert*-leucinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{27}H_{27}NO_2$

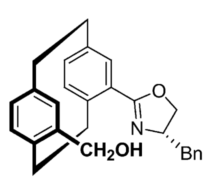
(*S*,4*Sp*,13*Rp*)-4-(4-Benzyl-oxazolin-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = +116.9$ (c 0.395, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{27}H_{27}NO_2$

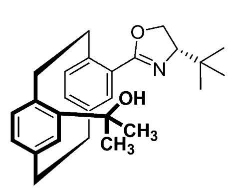
(*S*,4*Rp*,13*Sp*)-4-(4-Benzyl-oxazolin-2-yl)-13-hydroxylmethyl[2.2]paracyclophane

$[\alpha]_D^{20} = -79.2$ (c 0.365, $CHCl_3$)

Source of chirality: (*S*)-phenylaniol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$C_{26}H_{33}NO_2$

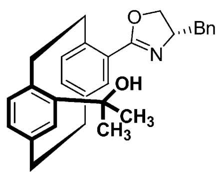
(*S*,4*Sp*,13*Rp*)-4-(4-*tert*-Butyl-oxazoline-2-yl)-13-(α,α-dimethylhydroxymethyl)[2.2]paracyclophane

$[\alpha]_D^{20} = +75.5$ (c 0.435, $CHCl_3$)

Source of chirality: (*S*)-*tert*-leucinol

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$[\alpha]_D^{20} = +52.5$ (*c* 0.36, $CHCl_3$)
Source of chirality: (*S*)-phenylaniol

$C_{29}H_{31}NO_2$
(*S*,4*Sp*,13*Rp*)-4-(4-Benzyl-oxazolin-2-yl)-13-(α,α-dimethylhydroxymethyl)[2.2]paracyclophane

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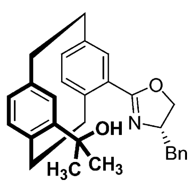
Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



$[\alpha]_D^{20} = +16.2$ (*c* 0.31, $CHCl_3$)
Source of chirality: (*S*)-phenylaniol

$C_{29}H_{31}NO_2$
(*S*,4*Rp*,13*Sp*)-4-(4-Benzyl-oxazolin-2-yl)-13-(α,α-dimethylhydroxymethyl)[2.2]paracyclophane

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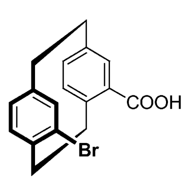
Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

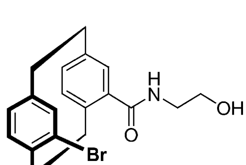


$[\alpha]_D^{20} = +46$ (*c* 0.105, $CHCl_3$)
Source of chirality: (*S*)-valinol

$C_{17}H_{15}BrO_2$
(4*Sp*,13*Rp*)-4-Bromo-13-carboxy[2.2]paracyclophane

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

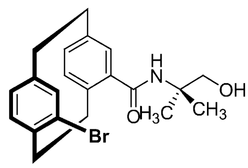


$[\alpha]_D^{20} = -22.7$ (*c* 0.5, $CHCl_3$)
Source of chirality: (*S*)-valinol

$C_{19}H_{20}BrNO_2$
(4*Sp*,13*Rp*)-4-Bromo-*N*-(1-hydroxy-2-ethyl)[2.2]paracyclophane-13-carboxamide

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

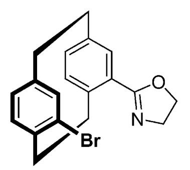


$[\alpha]_D^{20} = +32.4$ (c 0.51, $CHCl_3$)
Source of chirality: (S)-valinol

$C_{21}H_{24}BrNO_2$
(4*Sp*,13*Rp*)-4-Bromo-*N*-(1-hydroxy-2-methyl-2-propyl)[2.2]paracyclophane13-carboxamide

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

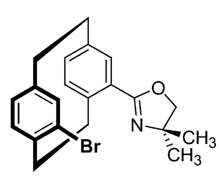


$[\alpha]_D^{20} = +31.3$ (c 0.49, $CHCl_3$)
Source of chirality: (S)-valinol

$C_{19}H_{18}BrNO$
(4*Sp*,13*Rp*)-4-Bromo-13-(oxazolin-2-yl)[2.2]paracyclophane

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

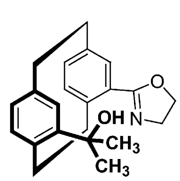


$[\alpha]_D^{20} = +41.1$ (c 0.55, $CHCl_3$)
Source of chirality: (S)-valinol

$C_{21}H_{22}BrNO_2$
(4*Sp*,13*Rp*)-4-Bromo-13-(4,4-dimethyl-oxazolin-2-yl)[2.2]paracyclophane

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*

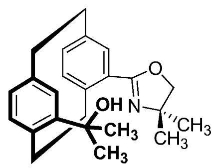


$[\alpha]_D^{20} = -59.0$ (c 0.395, $CHCl_3$)
Source of chirality: (S)-valinol

$C_{22}H_{25}NO_2$
(4*Rp*,13*Sp*)-4-(Oxazolin-2-yl)-13-(α,α-dimethylhydroxymethyl)[2.2]paracyclophane

Xun-Wei Wu, Tang-Zhi Zhang, Ke Yuan and Xue-Long Hou*

Tetrahedron: Asymmetry *15 (2004) 2357*



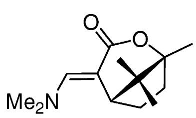
$C_{24}H_{29}NO_2$

(4*Rp*,13*Sp*)-4-(4,4-Dimethyl-oxazolin-2-yl)-13-(α,α-dimethylhydroxymethyl)[2.2]paracyclophane

$[\alpha]_D^{20} = -41.4$ (*c* 0.39, $CHCl_3$)
Source of chirality: (*S*)-valinol

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



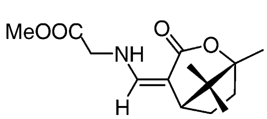
$C_{13}H_{21}NO_2$

(1*R*,4*E*,5*S*)-3-[(Dimethylamino)methylidene]-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%
$[\alpha]_D^{21} = +372.9$ (*c* 0.262, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*Z*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{14}H_{21}NO_4$

Methyl ({(*Z*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]methyl}amino)acetate

De = 100%
$[\alpha]_D^{22} = +2.9$ (*c* 0.456, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*Z*,5*S*)

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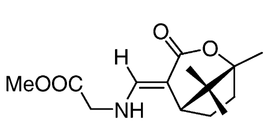
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{14}H_{21}NO_4$

De = 100%
$[\alpha]_D^{20} = +118.3$ (*c* 0.240, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*E*,5*S*)

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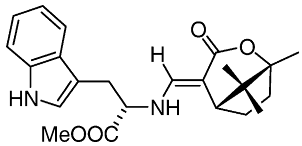
Tetrahedron: Asymmetry *15 (2004) 2367*



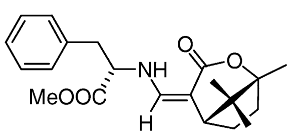
$C_{23}H_{28}N_2O_4$

De = 100%
$[\alpha]_D^{28} = +109.0$ (c 0.122, $CHCl_3$)
Source of chirality: natural (1*R*)-(+)-camphor and (*S*)-tryptophane
Absolute configuration: (2*S*,1′*R*,4′*E*,5′*S*)

Methyl (2*S*)-3-(1*H*-indol-3-yl)-2-({(*E*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]-methyl}amino)propanoate

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



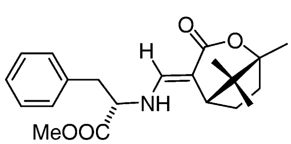
$C_{21}H_{27}NO_4$

De = 100%
$[\alpha]_D^{21} = -153.4$ (c 0.088, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor and (*S*)-3-phenylalanine
Absolute configuration: (2*S*)-(1′*R*,4′*Z*,5′*S*)

Methyl (2*S*)-3-phenyl-2-({(*Z*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]methyl}-amino)propanoate

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



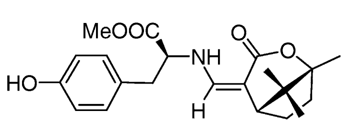
$C_{21}H_{27}NO_4$

De = 100%
$[\alpha]_D^{28} = +129.5$ (c 0.156, $CHCl_3$)
Source of chirality: natural (1*R*)-(+)-camphor and (*S*)-3-phenylalanine
Absolute configuration: (2*S*)-(1′*R*,4′*E*,5′*S*)

Methyl (2*S*)-3-phenyl-2-({(*E*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]methyl}-amino)propanoate

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



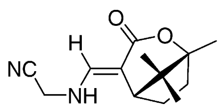
$C_{21}H_{27}NO_5$

De = 100%; *E*:*Z*=8:92
$[\alpha]_D^{22} = -97.6$ (c 0.332, DMSO)
Source of chirality: natural (1*R*)-(+)-camphor and (*S*)-tyrosine
Absolute configuration: (2*S*)-(1′*R*,4′*Z*,5′*S*)

Methyl (2*S*)-3-(4-hydroxyphenyl)-2-({(*Z*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]-methyl}amino)propanoate

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{13}H_{18}N_2O_2$

2-({(*E*)-[(1*R*,5*S*)-1,8,8-Trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]methyl}amino)acetonitrile

De = 100%; *E*:*Z*=92:8

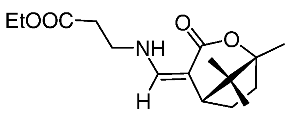
$[\alpha]_D^{22} = +120.5$ (*c* 0.224, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*E*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{16}H_{25}NO_4$

Ethyl 3-({(*Z*)-[(1*R*,5*S*)-1,8,8-trimethyl-3-oxo-2-oxabicyclo[3.2.1]oct-4-ylidene]methyl}amino)propanoate

De = 100%; *Z*:*E*=77:23

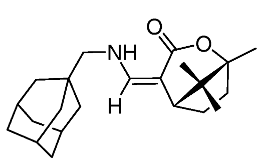
$[\alpha]_D^{25} = +18.0$ (*c* 0.538, $CHCl_3$)

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

Absolute configuration: (1*R*,4*Z*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{22}H_{23}NO_2$

(1*R*,4*Z*,5*S*)-4-({[(1-Adamantyl)methyl]amino}methylidene)-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

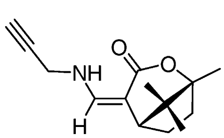
$[\alpha]_D^{19} = +30.8$ (*c* 0.013, DMSO)

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

Absolute configuration: (1*R*,4*Z*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{14}H_{19}NO_2$

(1*R*,4*Z*,5*S*)-4-{[(Prop-1-yn-3-yl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{21} = 0$ (*c* 0.158, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*Z*,5*S*)

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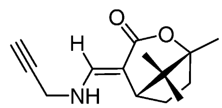
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{14}H_{19}NO_2$

(1*R*,4*E*,5*S*)-4-{[(Prop-1-yn-3-yl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%; *Z*:*E*=4:96

$[\alpha]_D^{21} = +130.6$ (*c* 0.170, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*E*,5*S*)

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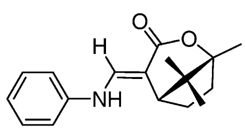
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{17}H_{21}NO_2$

(1*R*,4*E*,5*S*)-4-(Anilinomethylidene)-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +188.2$ (*c* 0.068, MeOH)

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

Absolute configuration: (1*R*,4*E*,5*S*)

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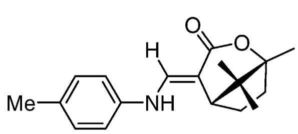
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{18}H_{23}NO_2$

(1*R*,4*E*,5*S*)-4-{[(4-Methylphenyl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +183.5$ (*c* 0.242, MeOH)

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

Absolute configuration: (1*R*,4*E*,5*S*)

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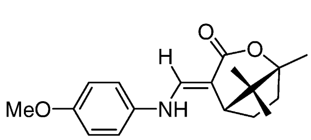
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{18}H_{23}NO_3$

(1*R*,4*E*,5*S*)-4-{[(4-Methoxyphenyl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +193.6$ (*c* 0.202, DMF)

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

Absolute configuration: (1*R*,4*E*,5*S*)

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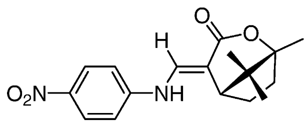
Tetrahedron: Asymmetry *15 (2004) 2367*

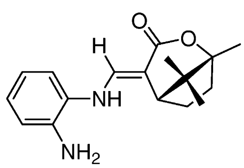


De = 100%; *E*:*Z*=68:32
$[\alpha]_D^{22} = +142.0$ (*c* 0.150, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*E*,5*S*)

$C_{17}H_{20}N_2O_4$
(1*R*,4*E*,5*S*)-4-{[(4-Nitrophenyl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*

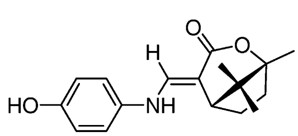


De = 100%; *E*:*Z*=90:10
$[\alpha]_D^{22} = -5.9$ (*c* 0.288, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*Z*,5*S*)

$C_{17}H_{22}N_2O_2$
(1*R*,4*Z*,5*S*)-4-{[(2-Aminophenyl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*

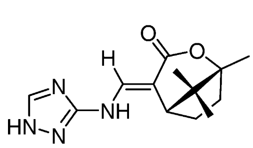


De = 100%
$[\alpha]_D^{22} = -12.8$ (*c* 0.196, CH_2Cl_2)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*Z*,5*S*)

$C_{17}H_{21}N_2O_3$
(1*R*,4*Z*,5*S*)-4-{[(4-Hydroxyphenyl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*

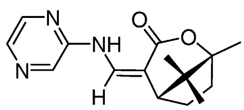


De = 100%
$[\alpha]_D^{22} = +125.6$ (*c* 0.133, MeOH)
Source of chirality: natural (1*R*)-(+)-camphor
Absolute configuration: (1*R*,4*E*,5*S*)

$C_{13}H_{18}N_4O_2$
(1*R*,4*E*,5*S*)-4-{[(1*H*-[1,2,4]Triazol-3-yl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc, Simon Rečnik, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{15}H_{19}N_3O_2$

(1*R*,4*Z*,5*S*)-4-[(Pyrazinylamino)methylidene]-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +12.9$ (*c* 0.294, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*Z*,5*S*)

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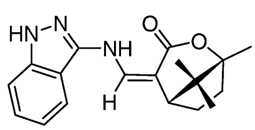
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{18}H_{21}N_3O_2$

(1*R*,4*Z*,5*S*)-4-{[(1*H*-Indazol-3-yl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +3.7$ (*c* 0.162, CH_2Cl_2)

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

Absolute configuration: (1*R*,4*Z*,5*S*)

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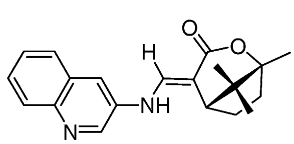
Tetrahedron: Asymmetry *15 (2004) 2367*



$C_{18}H_{21}N_3O_2$

(1*R*,4*E*,5*S*)-4-{[(Quinolin-3-yl)amino]methylidene}-1,8,8-trimethyl-2-oxabicyclo[3.2.1]octan-3-one

De = 100%

$[\alpha]_D^{22} = +175.3$ (*c* 0.178, DMF)

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

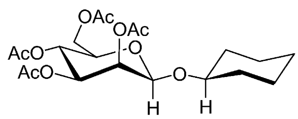
Absolute configuration: (1*R*,4*E*,5*S*)

Uroš Grošelj, David Bevk, Renata Jakše, Anton Meden, Samo Pirc

Tetrahedron: Asymmetry *15 (2004) 2367*

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



$C_{20}H_{30}O_{10}$

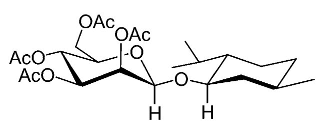
Cyclohexyl 2,3,4,6-tetra-*O*-acetyl-β-D-mannopyranoside

$[\alpha]_D^{25} = -42.3$ (*c* 1.3, $CHCl_3$)

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



$C_{24}H_{38}O_{10}$

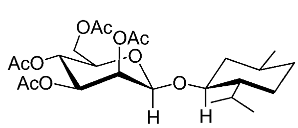
(1*R*,2*S*,5*R*)-Menthyl 2,3,4,6-tetra-*O*-acetyl-β-D-mannopyranoside

$[\alpha]_D^{25} = -81.2$ (*c* 1.5, $CHCl_3$)

Source of chirality: D-(+)-glucal and (−)-menthol

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



$C_{24}H_{38}O_{10}$

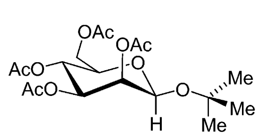
(1*S*,2*R*,5*S*)-Menthyl 2,3,4,6-tetra-*O*-acetyl-β-D-mannopyranoside

$[\alpha]_D^{25} = +9.0$ (*c* 0.4, $CHCl_3$)

Source of chirality: D-(+)-glucal and (+)-menthol

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



$C_{18}H_{28}O_{10}$

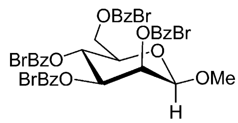
tert-Butyl 2,3,4,6-tetra-*O*-acetyl-β-D-mannopyranoside

$[\alpha]_D^{25} = -30.4$ (*c* 2.0, $CHCl_3$)

Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



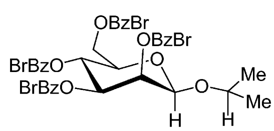
$C_{35}H_{26}Br_4O_{10}$

Methyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -177.8$ (*c* 0.2, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−62.8), 234 nm (20.0)
Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



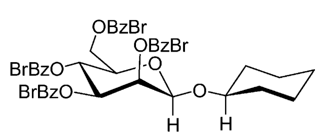
$C_{37}H_{30}Br_4O_{10}$

iso-Propyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -163.4$ (*c* 1.6, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−63.7), 234 nm (20.7)
Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



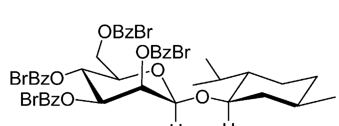
$C_{40}H_{34}Br_4O_{10}$

Cyclohexyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -159.9$ (*c* 1.2, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−63.9), 234 nm (20.7)
Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



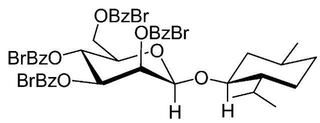
$C_{44}H_{42}Br_4O_{10}$

(1*R*,2*S*,5*R*)-Menthyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -155.3$ (*c* 1.4, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−63.2), 234 nm (23.5)
Source of chirality: D-(+)-glucal and (−)-menthol

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



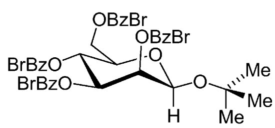
$C_{44}H_{42}Br_4O_{10}$

(1*S*,2*R*,5*S*)-Menthyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -104.7$ (*c* 0.8, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−67.9), 234 nm (23.2)
Source of chirality: D-(+)-glucal and (+)-menthol

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



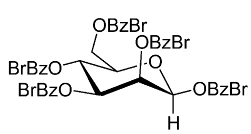
$C_{38}H_{32}Br_4O_{10}$

tert-Butyl 2,3,4,6-tetra-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -127.9$ (*c* 0.4, $CHCl_3$)
CD (CH_3CN) λ_{ext} ($\Delta\varepsilon$) 252 nm (−67.9), 234 nm (20.7)
Source of chirality: D-(+)-glucal

Carlos Mayato, Rosa L. Dorta and Jesús T. Vázquez*

Tetrahedron: Asymmetry *15 (2004) 2385*



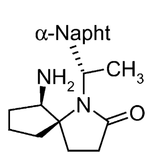
$C_{41}H_{24}Br_5O_{11}$

1,2,3,4,6-Penta-*O*-(*p*-bromobenzoyl)-β-D-mannopyranoside

$[\alpha]_D^{25} = -85.5$ (*c* 1.5, $CHCl_3$)
Source of chirality: D-(+)-mannose

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



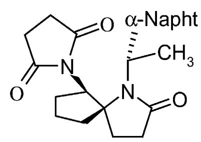
$C_{20}H_{24}N_2O$

(5*R*,6*R*,1′*S*)-6-Amino-1-(1-naphthalen-2-yl-ethyl)-1-aza-spiro[4.4]nonan-2-one

De >95%
$[\alpha]_D^{25} = +282$ (*c* 1.00, $CHCl_3$)
Source of chirality: asymmetric induction

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



De >95%

$[\alpha]_D^{25} = +71$ (*c* 1.00, $CHCl_3$)

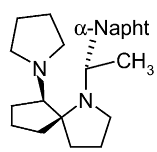
Source of chirality: asymmetric induction

$C_{24}H_{26}N_2O_3$

(5′*R*,6′*R*,1″*S*)-1-[1-(1-Naphthalen-1-yl-ethyl)-2-oxo-1-aza-spiro[4.4]non-6-yl]-pyrrolidine-2,5-dione

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



De >95%

$[\alpha]_D^{25} = +107$ (*c* 1.1, $CHCl_3$)

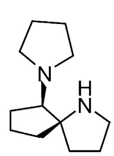
Source of chirality: asymmetric induction

$C_{24}H_{26}N_2$

(5*R*,6*R*,1′*S*)-1-(1-Naphthalen-1-yl-ethyl)-6-pyrrolidin-1-yl-1-aza-spiro[4.4]nonan-2-one

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



De >95%

$[\alpha]_D^{25} = -48$ (*c* 0.4, $CHCl_3$) (picrate salt)

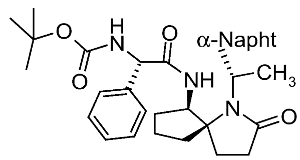
Source of chirality: asymmetric induction

$C_{12}H_{22}N_2$

(5*R*,6*R*)-6-Pyrrolidin-1-yl-1-aza-spiro[4.4]nonane

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



De >95%

$[\alpha]_D^{25} = +279$ (*c* 1.00, $CHCl_3$)

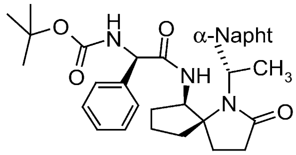
Source of chirality: asymmetric induction

$C_{33}H_{39}N_3O_4$

(1*S*,6*R*,1′*R*)-[1-(1-Naphthalen-2-yl-ethyl)-2-oxo-1-aza-spiro[4.4]non-6-ylcarbamoyl-phenyl-methyl]-carbamic acid *tert*-butyl ester

Loïc Planas, Joëlle Pérard-Viret and Jacques Royer*

Tetrahedron: Asymmetry *15 (2004) 2399*



$C_{24}H_{26}N_2O_3$

(1*R*,6*R*,1′*R*)-[1-(1-Naphthalen-2-yl-ethyl)-2-oxo-1-aza-spiro[4.4]non-6-ylcarbamoyl-phenyl-methyl]-carbamic acid *tert*-butyl ester

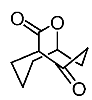
De >95%

$[\alpha]_D^{25} = +203$ (*c* 1.03, $CHCl_3$)

Source of chirality: asymmetric induction

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_9H_{12}O_3$

(−)-(1*S*,5*R*)-9-Oxabicyclo[3.3.2]decane-4,10-dione

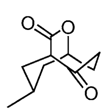
$[\alpha]_D^{20} = -85$ (*c* 0.013, EtOH)

Source of chirality: HPLC resolution

Absolute configuration: (1*S*,5*R*) (assigned by CD spectroscopy and chemical correlation)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_{10}H_{14}O_3$

(+)-(1*S*,5*S*,7*R*)-7-Methyl-9-oxabicyclo[3.3.2]decane-4,10-dione

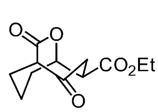
$[\alpha]_{546}^{20} = +145$ (*c* 0.069, EtOH)

Source of chirality: HPLC resolution

Absolute configuration: (1*S*,5*S*,7*R*) (assigned by CD spectroscopy and chemical correlation)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_{12}H_{16}O_5$

(−)-(1*S*,2*R*,5*R*)-Ethyl 4,10-dioxo-9-oxabicyclo[3.3.2]decane-2-carboxylate

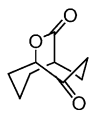
$[\alpha]_{546}^{20} = -54$ (*c* 0.11, EtOH)

Source of chirality: HPLC resolution

Absolute configuration: (1*S*,2*R*,5*R*) (assigned by CD spectroscopy and chemical correlation)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_9H_{12}O_3$

(+)-(1*S*,5*R*)-9-Oxabicyclo-[3.3.2]decane-2,10-dione

Ee = 81%

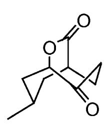
$[\alpha]_{546}^{20} = +183$ (*c* 0.1, EtOH)

Source of chirality: enantiospecific synthesis

Absolute configuration: (1*S*,5*R*) (assigned by CD spectroscopy and chemical correlation)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_{10}H_{14}O_3$

(−)-(1*R*,5*R*,7*R*)-7-Methyl-9-oxabicyclo[3.3.2]decane-2,10-dione

Ee = 83%

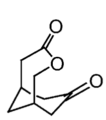
$[\alpha]_{546}^{20} = -71$ (*c* 0.16, EtOH)

Source of chirality: enantiospecific synthesis

Absolute configuration: (1*R*,5*R*,7*R*) (assigned by CD spectroscopy and chemical correlation)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_9H_{12}O_3$

(−)-(1*R*,6*S*)-3-Oxabicyclo[4.3.1]decane-4,8-dione

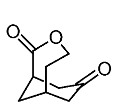
$[\alpha]_{D}^{20} = -12$ (*c* 0.06, EtOH)

Source of chirality: HPLC resolution

Absolute configuration: (1*R*,6*S*) (assigned by CD spectroscopy)

Sigitas Stončius,* Ulf Berg and Eugenius Butkus

Tetrahedron: Asymmetry *15 (2004) 2405*



$C_9H_{12}O_3$

(+)-(1*R*,6*R*)-3-Oxabicyclo[4.3.1]decane-2,8-dione

Ee = 100%

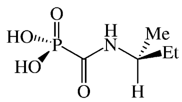
$[\alpha]_{546}^{20} = +15$ (*c* 0.86, $CHCl_3$)

Source of chirality: enantiospecific synthesis

Absolute configuration: (1*R*,6*R*) (assigned by CD spectroscopy and chemical correlation)

Eli Breuer,* Yiffat Katz, Rivka Hadar and Reuven Reich*

Tetrahedron: Asymmetry *15 (2004) 2415*



$C_5H_{12}NO_4P$

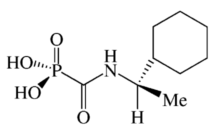
N-(*S*)-2-Butylcarbamoylphosphonic acid

$[\alpha]_D^{20} = +13.5$ (*c* 0.0185, MeOH)

Source of chirality: (*S*)-(+)-2-aminobutane

Eli Breuer,* Yiffat Katz, Rivka Hadar and Reuven Reich*

Tetrahedron: Asymmetry *15 (2004) 2415*



$C_9H_{18}NO_4P$

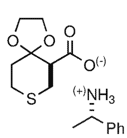
N-[(*R*)-1-Cyclohexylethyl]carbamoylphosphonic acid

$[\alpha]_D^{20} = +21.0$ (*c* 0.07, MeOH)

Source of chirality: (*R*)-(−)-1-cyclohexylethyl-amine

Dale E. Ward,* Olukayode T. Akinnusi, Idralyn Q. Alarcon, Vishal Jheengut, Jianheng Shen and J. Wilson Quail

Tetrahedron: Asymmetry *15 (2004) 2425*



$C_{16}H_{23}NO_4S$

(1*S*)-1-Phenylethylammonium (6*S*)-1,4-dioxa-8-thia-spiro[4.5]decane-6-carboxylate

Ee >98%

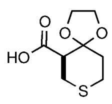
$[\alpha]_D^{24} = +34$ (*c* 1.0, $CHCl_3$)

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

Absolute configuration: (1*S*,6*S*) (X-ray)

Dale E. Ward,* Olukayode T. Akinnusi, Idralyn Q. Alarcon, Vishal Jheengut, Jianheng Shen and J. Wilson Quail

Tetrahedron: Asymmetry *15 (2004) 2425*



$C_8H_{12}O_4S$

(6*R*)-1,4-Dioxa-8-thia-spiro[4.5]decane-6-carboxylic acid

Ee >98%

$[\alpha]_D^{24} = -60$ (*c* 1.0, $CHCl_3$)

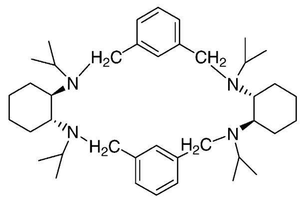
Source of chirality: resolution

Absolute configuration: (6*R*)

Dale E. Ward,* Olukayode T. Akinnusi, Idralyn O. Alarcon | *Tetrahedron:* Asymmetry *15 (2004) 2425*

Meduri Padmaja and Mariappan Periasamy*

Tetrahedron: Asymmetry *15 (2004) 2437*



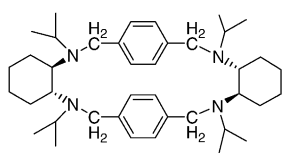
$C_{40}H_{64}N_4$

(2*R*,3*R*,11*R*,12*R*)-*N*,*N*′,*N*″,*N*‴-Tetrakis-(2-propyl)-1,4,10,13-tetraaza-2,3;11,12-dibutano-6,9;15,17-dietheno-2*H*,3*H*,5*H*,9*H*,11*H*,12*H*,14*H*,18*H*-dodecahydro-(18)-annulene

Ee >98%
$[\alpha]_D^{25} = -95$ (*c* 0.4, 1M HCl)
Source of chirality: resolution
Absolute configuration: (2*R*,3*R*,11*R*,12*R*)

Meduri Padmaja and Mariappan Periasamy*

Tetrahedron: Asymmetry *15 (2004) 2437*



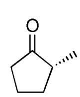
$C_{40}H_{64}N_4$

(2*R*,3*R*,12*R*,13*R*)-*N*,*N*′,*N*″,*N*‴-Tetrakis-(2-propyl)-1,4,11,14-tetraaza-2,3;12,13-dibutano-6,9;16,19-dietheno-2*H*,3*H*,5*H*,10*H*,12*H*,13*H*,15*H*,20*H*-dodecahydro-(20)-annulene

Ee >98%
$[\alpha]_D^{25} = -20.5$ (*c* 0.3, CH_2Cl_2)
Source of chirality: resolution
Absolute configuration: (2*R*,3*R*,12*R*,13*R*)

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



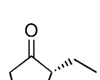
$C_6H_{10}O$

(*R*)-2-Methylcyclopentan-1-one

Ee = 100%
$[\alpha]_D^{25} = -112.4$ (*c* 0.51, $CHCl_3$)
Source of chirality: asymmetric reduction with reductase from *Nicotiana tabacum*
Absolute configuration: *R*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



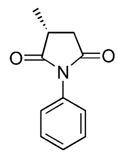
$C_7H_{12}O$

(*R*)-2-Ethylcyclopentan-1-one

Ee >99%
$[\alpha]_D^{25} = -125.7$ (*c* 0.45, $CHCl_3$)
Source of chirality: asymmetric reduction with reductase from *N. tabacum*
Absolute configuration: *R*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



$C_{11}H_{11}NO_2$

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

Ee = 100%

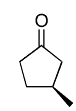
$[\alpha]_D^{25} = +7.3$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric reduction with reductase from *N. tabacum*

Absolute configuration: *R*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



$C_6H_{10}O$

(*S*)-3-Methylcyclopentan-1-one

Ee = 100%

$[\theta]_{294} = -5653$ (*c* 0.55, MeOH)

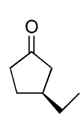
$[\alpha]_D^{25} = -147.0$ (*c* 0.4, MeOH)

Source of chirality: asymmetric reduction with reductase from *N. tabacum*

Absolute configuration: *S*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



$C_7H_{12}O$

(*S*)-3-Ethylcyclopentan-1-one

Ee = 100%

$[\theta]_{294} = -6257$ (*c* 0.36, MeOH)

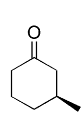
$[\alpha]_D^{25} = -153.5$ (*c* 0.3, MeOH)

Source of chirality: asymmetric reduction with reductase from *N. tabacum*

Absolute configuration: *S*

Kei Shimoda,* Naoji Kubota and Hiroki Hamada

Tetrahedron: Asymmetry *15 (2004) 2443*



$C_7H_{12}O$

(*S*)-3-Methylcyclohexan-1-one

Ee = 100%

$[\theta]_{289} = -1877$ (*c* 0.59, MeOH)

$[\alpha]_D^{25} = -13.2$ (*c* 0.4, MeOH)

Source of chirality: asymmetric reduction with reductase from *N. tabacum*

Absolute configuration: *S*

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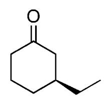

$C_8H_{14}O$

(*S*)-3-Ethylcyclohexan-1-one

Ee >99%

$[\theta]_{288} = -2270$ (*c* 0.50, MeOH)

$[\alpha]_D^{25} = -19.9$ (*c* 0.2, MeOH)

Source of chirality: asymmetric reduction with reductase from *N. tabacum*

Absolute configuration: *S*