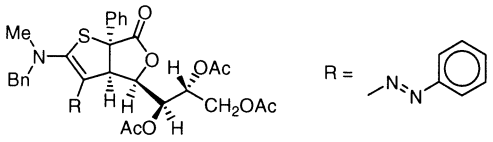
Tetrahedron: Asymmetry *12 (2001) 2261*

Martín Avalos, Reyes Babiano, Pedro Cintas, Fernando R. Clemente, Ruth Gordillo, Michael B. Hursthouse, José L. Jiménez,* Mark E. Light and Juan C. Palacios



$[\alpha]_{578} = -1442.4$ (c 0.7, $CHCl_3$)

Source of chirality: chiral precursor

$C_{35}H_{35}N_3O_8S$

(3a*R*,4*R*,6a*S*)-4-(1′,2′,3′-Tri-*O*-acetyl-D-*erythro*-tritol-1-yl)-2-(*N*-methyl)benzylamino-6a-phenyl-3-[(1*E*)-phenylazo]-3a*H*,4*H*,6a*H*-thieno[2,3-*c*]furan-6-one

Tetrahedron: Asymmetry *12 (2001) 2261*

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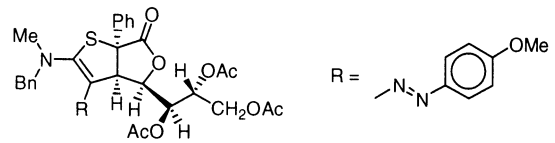

$[\alpha]_{578} = -1058.9$ (c 0.9, $CHCl_3$)

Source of chirality: chiral precursor

$C_{36}H_{37}N_3O_9S$

(3a*R*,4*R*,6a*S*)-4-(1′,2′,3′-Tri-*O*-acetyl-D-*erythro*-tritol-1-yl)-3-[(1*E*)-(4-methoxyphenyl)azo]-2-(*N*-methyl)-benzylamino-6a-phenyl-3a*H*,4*H*,6a*H*-thieno[2,3-*c*]furan-6-one

Tetrahedron: Asymmetry *12 (2001) 2261*

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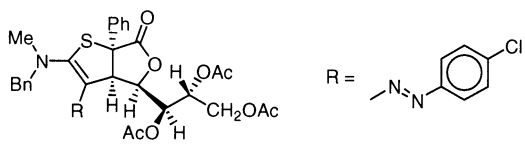


$[\alpha]_{578} = -1365.4$ (c 1.1, $CHCl_3$)

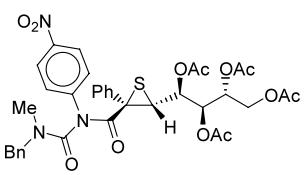
Source of chirality: chiral precursor

$C_{35}H_{34}ClN_3O_8S$

(3a*R*,4*R*,6a*S*)-4-(1′,2′,3′-Tri-*O*-acetyl-D-*erythro*-tritol-1-yl)-3-[(1*E*)-(4-chlorophenyl)azo]-2-(*N*-methyl)-benzylamino-6a-phenyl-3a*H*,4*H*,6a*H*-thieno[2,3-*c*]furan-6-one

Tetrahedron: Asymmetry *12 (2001) 2265*

Martín Avalos, Reyes Babiano, Pedro Cintas, Fernando R. Clemente, Ruth Gordillo, Michael B. Hursthouse, José L. Jiménez, Mark E. Light and Juan C. Palacios*



$[\alpha]_D = +165.6$ (c 0.4, $CHCl_3$)

Source of chirality: asymmetric synthesis

$C_{36}H_{37}N_3O_{12}S$

(2*R*,3*R*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-[4-benzyl-2-(4-nitrophenyl)-1,3-dioxo-2,4-diazapentyl]-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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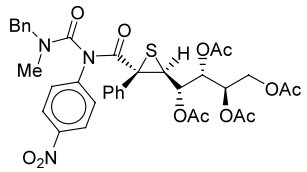

$[\alpha]_D = -170.6$ (c 0.8, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{36}H_{37}N_3O_{12}S$

(2*S*,3*S*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-[4-benzyl-2-(4-nitrophenyl)-1,3-dioxo-2,4-diazapentyl]-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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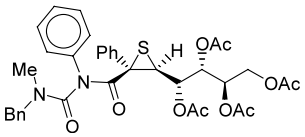

$[\alpha]_D = -176.3$ (c 1.0, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{36}H_{38}N_2O_{10}S$

(2*R*,3*S*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-(4-benzyl-1,3-dioxo-2-phenyl-2,4-diazapentyl)-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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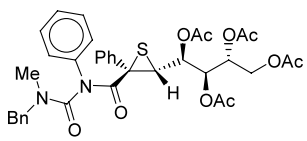

$[\alpha]_D = +140.9$ (c 0.5, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{36}H_{38}N_2O_{10}S$

(2*R*,3*R*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-(4-benzyl-1,3-dioxo-2-phenyl-2,4-diazapentyl)-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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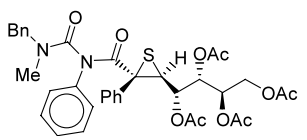

$[\alpha]_D = -162.4$ (c 0.2, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{36}H_{38}N_2O_{10}S$

(2*S*,3*S*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-(4-benzyl-1,3-dioxo-2-phenyl-2,4-diazapentyl)-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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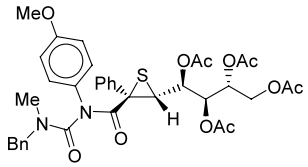

$[\alpha]_D = +110.1$ (c 1.2, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{37}H_{40}N_2O_{11}S$
(2*R*,3*R*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-[4-benzyl-2-(4-methoxyphenyl)-1,3-dioxo-2,4-diazapentyl]-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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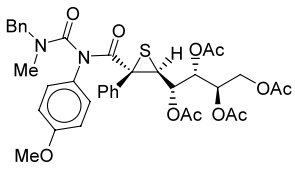

$[\alpha]_D = -88.3$ (c 0.4, $CHCl_3$)
Source of chirality: asymmetric synthesis

$C_{37}H_{40}N_2O_{11}S$
(2*S*,3*S*)-3-(Tetra-*O*-acetyl-D-*arabino*-tetritol-1′-yl)-2-[4-benzyl-2-(4-methoxyphenyl)-1,3-dioxo-2,4-diazapentyl]-2-phenylthiirane

Tetrahedron: Asymmetry *12 (2001) 2265*

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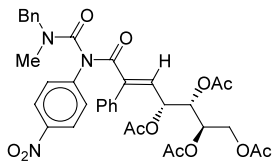

$[\alpha]_D = -18.5$ (c 0.1, $CHCl_3$)
Source of chirality: chiral precursor

$C_{36}H_{37}N_3O_{12}$
(*E*)-*N*-(*N*′-Benzyl-*N*′-methylcarbamoyl)-*N*-(4-nitrophenyl)-2,3-dideoxy-2-phenyl-tetra-*O*-acetyl-D-*arabino*-hept-2-enamide

Tetrahedron: Asymmetry *12 (2001) 2265*

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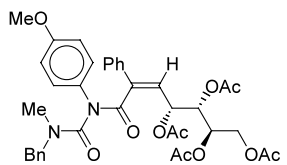
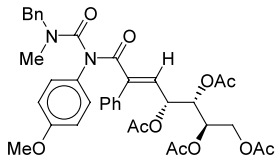


$[\alpha]_D = -167.6$ (c 0.3, $CHCl_3$)
Source of chirality: chiral precursor

$C_{37}H_{40}N_2O_{11}$
(*Z*)-*N*-(*N*′-Benzyl-*N*′-methylcarbamoyl)-*N*-(4-methoxyphenyl)-2,3-dideoxy-2-phenyl-tetra-*O*-acetyl-D-*arabino*-hept-2-enamide

Martín Avalos, Reyes Babiano, Pedro Cintas, Fernando R. Clemente, Ruth Gordillo, Michael B. Hursthouse, José L. Jiménez, Mark E. Light and Juan C. Palacios*

Tetrahedron: Asymmetry *12 (2001) 2265*



$[\alpha]_D = +11.2$ (c 0.3, $CHCl_3$)
Source of chirality: chiral precursor

$C_{37}H_{40}N_2O_{11}$
(*E*)-*N*-(*N*′-Benzyl-*N*′-methylcarbamoyl)-*N*-(4-methoxyphenyl)-2,3-dideoxy-2-phenyl-tetra-*O*-acetyl-D-*arabino*-hept-2-enamide

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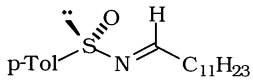
Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*

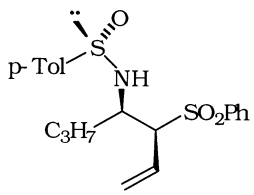


E.e. >98%
$[\alpha]_D^{25}$ 176.3 ($c = 1.9$, $CHCl_3$)
Source of chirality: chiral starting material
Absolute configuration: (*S*)

$C_{19}H_{31}NOS$
(*S*)-(+)-*N*-Dodecylidene-*p*-toluenesulfinamide

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



E.e. >98%
$[\alpha]_D^{25}$ +141.4 ($c = 1.4$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,4*R*)

$C_{20}H_{25}NO_3S_2$
(3*S*)-Phenylsulfonyl-(4*R*)-[*N*-(*p*-tolylsulfinyl)amino]hept-1-ene

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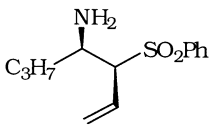
Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*

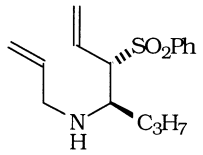


E.e. >98%
$[\alpha]_D^{25}$ −73.1 ($c = 1.3$, $CHCl_3$)
Source of chirality: asymmetric synthesis
Absolute configuration: (3*S*,4*R*)

$C_{13}H_{19}NO_2S$
(4*R*)-Amino-(3*S*)-phenylsulfonylhept-1-ene

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{16}H_{23}NO_3S$

(4*R*)-*N*-(2-Propenyl)amino-(3*S*)-phenylsulfonylhept-1-ene

E.e. >98%

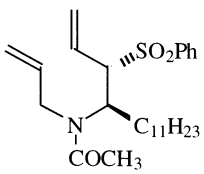
$[\alpha]_D^{25}$ −48.2 ($c = 0.85$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*)

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{26}H_{41}NO_3S$

(4*R*)-*N*-(2-Propenyl)acetamido-(3*S*)-phenylsulfonylpentadec-1-ene

E.e. = 32%

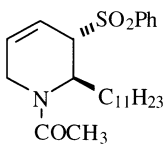
$[\alpha]_D^{25}$ −3.6 ($c = 3.9$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*)

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{24}H_{37}NO_3S$

N-Acetyl-(5*S*)-phenylsulfonyl-(6*R*)-*n*-undecyl-1,2,5,6-tetrahydropyridine

E.e. = 32%

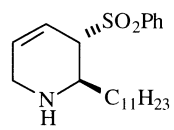
$[\alpha]_D^{25}$ +52.5 ($c = 1.6$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{22}H_{35}NO_2S$

(5*S*)-Phenylsulfonyl-(6*R*)-*n*-undecyl-1,2,5,6-tetrahydropyridine

E.e. = 32%

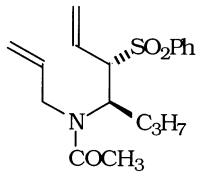
$[\alpha]_D^{25}$ +38 ($c = 1.05$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{18}H_{25}NO_3S$

(4*R*)-*N*-(2-Propenyl)-*N*-acetylamino-(3*S*)-phenylsulfonylhept-1-ene

E.e. >98%

$[\alpha]_D^{25}$ −30 ($c=2$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*)

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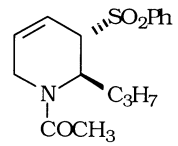
Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{16}H_{26}NO_3S$

N-Acetyl-(5*S*)-phenylsulfonyl-(6*R*)-*n*-propyl-1,2,5,6-tetrahydropyridine

E.e. >98%

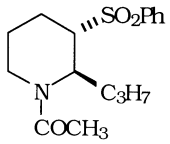
$[\alpha]_D^{25}$ +196 ($c=1.2$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{16}H_{23}NO_3S$

N-Acetyl-(2*R*)-*n*-propyl-(3*S*)-phenylsulfonylpiperidine

E.e. >98%

$[\alpha]_D^{25}=-16$ ($c=2.25$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

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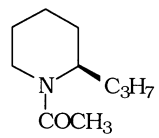
Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{10}H_{19}NO$

N-Acetyl-(*R*)-coniine

E.e. >99%

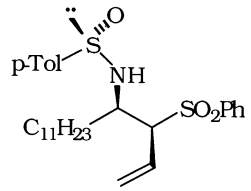
$[\alpha]_D^{25}=-48.6$ ($c=0.72$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{28}H_{41}NO_3S_2$

(3*S*)-Phenylsulfonyl-(4*R*)-[*N*-(*p*-tolylsulfinyl)amino]pentadec-1-ene

E.e. = 32%

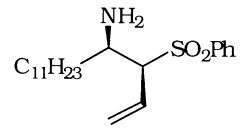
$[\alpha]_D^{25}$ +108 ($c = 1.5$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (S_s,3*S*,4*R*)

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{21}H_{35}NO_2S$

(4*R*)-Amino-(3*S*)-phenylsulfonylpentadec-1-ene

E.e. = 32%

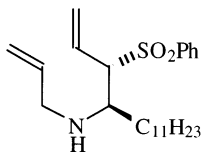
$[\alpha]_D^{25}$ −15.3 ($c = 1.5$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*)

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{24}H_{39}NO_2S$

(4*R*)-*N*-(2-Propenyl)amino-(3*S*)-phenylsulfonylpentadec-1-ene

E.e. = 32%

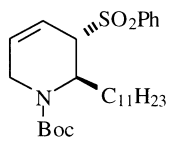
$[\alpha]_D^{25}$ −15.8 ($c = 1.9$, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*S*,4*R*)

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{27}H_{43}NO_4S$

N-Boc-(5*S*)-phenylsulfonyl-(6*R*)-*n*-undecyl-1,2,5,6-tetrahydropyridine

E.e. = 32%

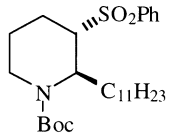
$[\alpha]_D^{25}$ +29.6 ($c = 2.6$, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Ramaiah Kumareswaran and Alfred Hassner*

Tetrahedron: Asymmetry *12 (2001) 2269*



$C_{27}H_{45}NO_4S$

N-Boc-(2*R*)-*n*-undecyl-(3*S*)-phenylsulfonylpiperidine

E.e. = 32%

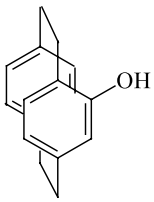
$[\alpha]_D^{25}$ −6.7 (*c* = 0.75, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Antonio Cipiciani,* Francesca Bellezza, Francesco Fringuelli and Maria Grazia Silvestrini

Tetrahedron: Asymmetry *12 (2001) 2277*



(+)-(*R*)-4-Hydroxy-[2,2]-paracyclophane

E.e. = 98%

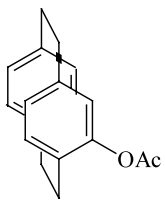
$[\alpha]_D^{20}$ = +8.1 (*c* 1.0, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *R*

Antonio Cipiciani,* Francesca Bellezza, Francesco Fringuelli and Maria Grazia Silvestrini

Tetrahedron: Asymmetry *12 (2001) 2277*



(+)-(*S*)-4-Acetoxy-[2,2]-paracyclophane

E.e. = 96%

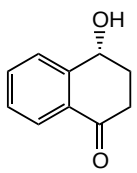
$[\alpha]_D^{20}$ = +40.3 (*c* 1.0, $CHCl_3$)

Source of chirality: enzymatic resolution

Absolute configuration: *S*

S. Joly and Mangalam S. Nair*

Tetrahedron: Asymmetry *12 (2001) 2283*



$C_{10}H_{10}O_2$

(*R*)-4-Hydroxytetralone

E.e. = 95% (by NMR)

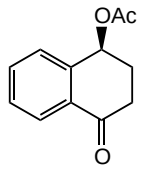
$[\alpha]_D^{27}$ = −35.5 (*c* 1.0, $CHCl_3$)

Source of chirality: enzymatic hydrolysis

Absolute configuration: *R*

S. Joly and Mangalam S. Nair*

Tetrahedron: Asymmetry *12 (2001) 2283*

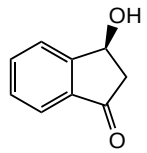


$C_{12}H_{12}O_3$
(*S*)-4-Acetoxytetralone

E.e. >96% (by NMR)
$[\alpha]_D^{27} = -80.4$ (*c* 1.0, $CHCl_3$)
Source of chirality: enzymatic hydrolysis
Absolute configuration: *S*

S. Joly and Mangalam S. Nair*

Tetrahedron: Asymmetry *12 (2001) 2283*

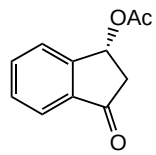


$C_9H_8O_2$
(*S*)-3-Hydroxyindanone

E.e. >96% (by NMR)
$[\alpha]_D^{27} = +99.5$ (*c* 0.9, $CHCl_3$)
Source of chirality: enzymatic transesterification
Absolute configuration: *S*

S. Joly and Mangalam S. Nair*

Tetrahedron: Asymmetry *12 (2001) 2283*

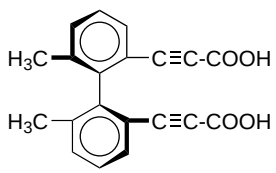


$C_{11}H_{10}O_3$
(*R*)-3-Acetoxyindanone

E.e. = 85% (by NMR)
$[\alpha]_D^{27} = -8.9$ (*c* 1.2, $CHCl_3$)
Source of chirality: enzymatic transesterification
Absolute configuration: *R*

Miloš Tichý, Petr Holý, Jiří Závada,* Ivana Císařová and Jaroslav Podlaha

Tetrahedron: Asymmetry *12 (2001) 2295*

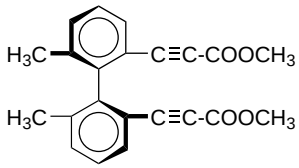


$C_{20}H_{14}O_4$
(*S*)-2,2′-Bis(carboxyethynyl)-6,6′-dimethyl-1,1′-biphenyl

E.e. = 100%
$[\alpha]_D^{20} = +148.8$ (*c* 0.5, EtOH)
Source of chirality: (*S*)-2,2′-dimethylbiphenyl-6,6′-dicarboxylic acid
Absolute configuration: (*S*)

Miloš Tichý, Petr Holý, Jiří Závada,* Ivana Císařová and Jaroslav Podlaha

Tetrahedron: Asymmetry *12 (2001) 2295*



$C_{22}H_{18}O_4$

(*S*)-2,2′-Bis(methoxycarbonylethynyl)-6,6′-dimethyl-1,1′-biphenyl

E.e. = 100%

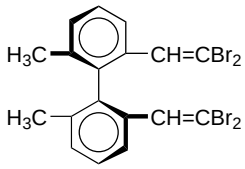
$[\alpha]_D^{20} = +185.4$ (*c* 0.5, MeOH)

Source of chirality: (*S*)-2,2′-dimethylbiphenyl-6,6′-dicarboxylic acid

Absolute configuration: (*S*)

Miloš Tichý, Petr Holý, Jiří Závada,* Ivana Císařová and Jaroslav Podlaha

Tetrahedron: Asymmetry *12 (2001) 2295*



$C_{18}H_{14}Br_4$

(*S*)-2,2′-Bis(2,2-dibromoethenyl)-6,6′-dimethyl-1,1′-biphenyl

E.e. = 100%

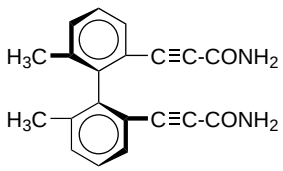
$[\alpha]_D^{20} = +65.1$ (*c* 1.1, EtOH)

Source of chirality: (*S*)-2,2′-dimethylbiphenyl-6,6′-dicarboxylic acid

Absolute configuration: (*S*)

Miloš Tichý, Petr Holý, Jiří Závada,* Ivana Císařová and Jaroslav Podlaha

Tetrahedron: Asymmetry *12 (2001) 2295*



$C_{20}H_{16}N_2O_2$

(*S*)-2,2′-Bis(carbamoylethynyl)-6,6′-dimethyl-1,1′-biphenyl

E.e. = 100%

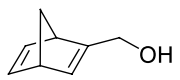
$[\alpha]_D^{20} = +153.5$ (*c* 0.5, MeOH)

Source of chirality: (*S*)-2,2′-dimethylbiphenyl-6,6′-dicarboxylic acid

Absolute configuration: (*S*)

Cihangir Tanyeli,* Gamze Çelikel and İdris Mecidoğlu Akhmedov

Tetrahedron: Asymmetry *12 (2001) 2305*



$C_8H_{10}O$

(1*R*,4*S*)-2-Hydroxymethylbicyclo[2.2.1]hepta-2,5-diene

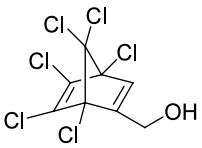
$[\alpha]_D^{20} = -1.5$ (*c* = 0.83, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Cihangir Tanyeli,* Gamze Çelikel and İdris Mecidoğlu Akhmedov

Tetrahedron: Asymmetry *12 (2001) 2305*



$C_8Cl_6H_4O$

(1*S*,4*R*)-2-Hydroxymethyl-1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hepta-2,5-diene

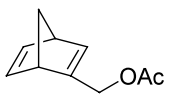
$[\alpha]_D^{20} = -7.3$ ($c = 1.66$, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Cihangir Tanyeli,* Gamze Çelikel and İdris Mecidoğlu Akhmedov

Tetrahedron: Asymmetry *12 (2001) 2305*



$C_{10}H_{12}O_2$

(1*S*,4*R*)-2-Acetoxymethylbicyclo[2.2.1]hepta-2,5-diene

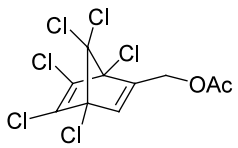
$[\alpha]_D^{20} = -2.4$ ($c = 0.66$, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Cihangir Tanyeli,* Gamze Çelikel and İdris Mecidoğlu Akhmedov

Tetrahedron: Asymmetry *12 (2001) 2305*



$C_{10}Cl_6H_6O_2$

(1*R*,4*S*)-2-Acetoxymethyl-1,4,5,6,7,7-hexachlorobicyclo[2.2.1]hepta-2,5-diene

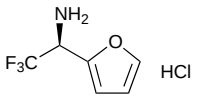
$[\alpha]_D^{20} = +4.1$ ($c = 1.33$, $CHCl_3$)

Source of chirality: enzymatic resolution

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

Ayhan S. Demir,* Özge Sesenoglu and Zuhal Gerçek-Arkin

Tetrahedron: Asymmetry *12 (2001) 2309*



$C_6H_6F_3NO{\cdot}HCl$

(*S*)-2,2,2-Trifluoro-1-furan-2-yl-ethylamine hydrochloride

E.e. = 88%

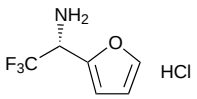
$[\alpha]_D^{25}$ 5.5 (*c* 2, MeOH)

Source of chirality: enantioselective reduction

Absolute configuration: (*S*)

Ayhan S. Demir,* Özge Sesenoglu and Zuhal Gerçek-Arkin

Tetrahedron: Asymmetry *12 (2001) 2309*



$C_6H_6F_3NO{\cdot}HCl$

(*R*)-2,2,2-Trifluoro-1-furan-2-yl-ethylamine hydrochloride

E.e. = 86%

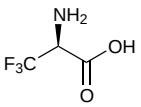
$[\alpha]_D^{25}$ −5.35 (*c* 2, MeOH)

Source of chirality: enantioselective reduction

Absolute configuration: (*R*)

Ayhan S. Demir,* Özge Sesenoglu and Zuhal Gerçek-Arkin

Tetrahedron: Asymmetry *12 (2001) 2309*



$C_3H_4F_3NO_2$

(*S*)-3,3,3-Trifluoroalanine

E.e. = 88%

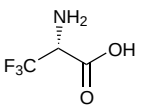
$[\alpha]_D^{25}$ −13.65 (*c* 1, MeOH)

Source of chirality: enantioselective reduction

Absolute configuration: (*S*)

Ayhan S. Demir,* Özge Sesenoglu and Zuhal Gerçek-Arkin

Tetrahedron: Asymmetry *12 (2001) 2309*



$C_3H_4F_3NO_2$

(*R*)-3,3,3-Trifluoroalanine

E.e. = 86%

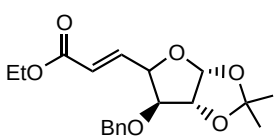
$[\alpha]_D^{25}$ 13.3 (*c* 1, MeOH)

Source of chirality: enantioselective reduction

Absolute configuration: (*R*)

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



$C_{19}H_{24}O_6$

Ethyl 5,6-dideoxy-1,2-*O*-isopropylidene-3-*O*-benzyl-α-D-*xylo*-hept-5-enofuranuronoate

$[\alpha]_D = -27.2$ ($c = 1$, $CHCl_3$)

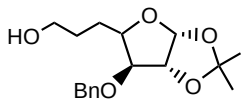
Source of chirality: D-glucose

Absolute configuration: (2*R*,3*S*,4*R*)

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*

$[\alpha]_D = -15.2$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*S*,4*R*)



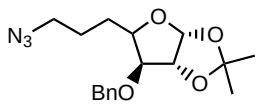
$C_{17}H_{24}O_5$

5,6-Dideoxy-3-*O*-benzyl-1,2-*O*-isopropylidene-α-D-*xylo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*

$[\alpha]_D = -49.1$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*S*,4*R*)



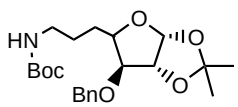
$C_{17}H_{23}N_3O_4$

7-Azido-3-*O*-benzyl-1,2-*O*-isopropylidene-5,6,7-trideoxy-α-D-*xylo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*

$[\alpha]_D = -32.2$ ($c = 1.25$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*S*,4*R*)



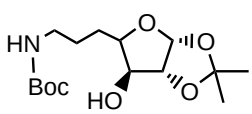
$C_{22}H_{33}NO_6$

3-*O*-Benzyl-7-*tert*-butoxycarbonylamino-α-1,2-*O*-isopropylidene-5,6,7-trideoxy-α-D-*xylo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*

$[\alpha]_D = -9.29$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*S*,4*R*)

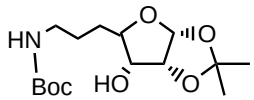


$C_{15}H_{27}NO_6$

7-*tert*-Butoxycarbonylamino-1,2-*O*-isopropylidene-5,6,7-trideoxy-α-D-*xylo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



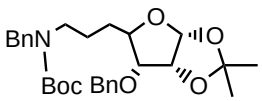
$[\alpha]_D = +10.0$ ($c = 1.1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{15}H_{27}NO_6$

7-*tert*-Butoxycarbonylamino-1,2-*O*-isopropylidene-5,6,7-trideoxy-α-D-*ribo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



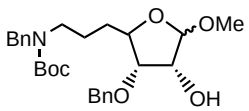
$[\alpha]_D = +48.5$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{29}H_{39}NO_6$

N-Benzyl-3-*O*-benzyl-7-*tert*-butoxycarbonylamino-1,2-*O*-isopropylidene-5,6,7-trideoxy-α-D-*ribo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



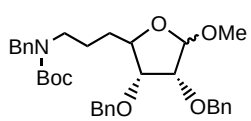
$[\alpha]_D = -10.2$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{27}H_{37}NO_6$

Methyl 7-*N*-benzylamino-3-*O*-benzyl-7-*tert*-butoxycarbonylamino-5,6,7-trideoxy-α/β-D-*ribo*-heptofuranoside

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



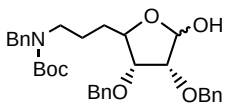
$[\alpha]_D = -12.3$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{34}H_{43}NO_6$

Methyl 7-*N*-benzylamino-7-*tert*-butoxycarbonylamino-2,3-di-*O*-benzyl-5,6,7-trideoxy-α/β-D-*ribo*-heptofuranoside

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



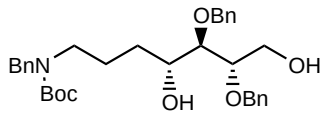
$[\alpha]_D = +25.5$ ($c = 1$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*R*,3*R*,4*R*)

$C_{33}H_{41}NO_6$

7-*N*-Benzylamino-7-*tert*-butoxycarbonylamino-2,3-di-*O*-benzyl-5,6,7-trideoxy-α/β-D-*ribo*-heptofuranose

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



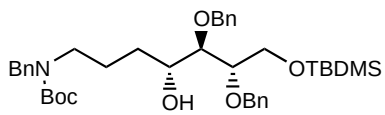
$[\alpha]_D = +16.3$ ($c = 1.5$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*R*,5*R*,6*S*)

$C_{33}H_{43}NO_6$

1*N*-Benzyl-*N*-(*tert*-butoxycarbonyl)-5,6-di-benzyloxy-4,7-dihydroxy-(4*R*,5*R*,6*S*)-heptylamine

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



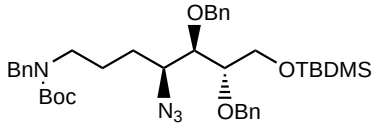
$[\alpha]_D = +10.2$ ($c = 0.5$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*R*,5*R*,6*S*)

$C_{39}H_{57}NO_6Si$

1-*N*-Benzyl-*N*-(*tert*-butoxycarbonyl)-5,6-di-benzyloxy-4-hydroxy-7-(*tert*-butyldimethylsilyloxy)-(4*R*,5*R*,6*S*)-heptylamine

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



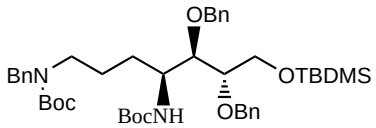
$[\alpha]_D = -6.2$ ($c = 0.5$, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (4*S*,5*R*,6*S*)

$C_{39}H_{56}N_4O_5Si$

1-*N*-Benzyl-*N*-(*tert*-butoxycarbonyl)-4-azido-5,6-di-benzyloxy-7-(*tert*-butyldimethylsilyloxy)-(4*S*,5*R*,6*S*)-heptylamine

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



$[\alpha]_D = -3.0$ ($c = 0.5$, $CHCl_3$)

Source of chirality: D-glucose

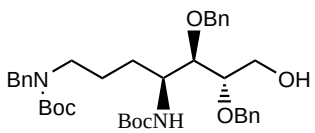
Absolute configuration: (4*S*,5*R*,6*S*)

$C_{44}H_{66}N_2O_7Si$

1*N*-Benzyl-*N*-(*tert*-butoxycarbonyl)-5,6-di-benzyloxy-7-(*tert*-butyldimethylsilyloxy)-4-(*tert*-butoxycarbonylamino)-(4*S*,5*R*,6*S*)-heptylamine

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



$[\alpha]_D = -14.8$ ($c = 0.7$, $CHCl_3$)

Source of chirality: D-glucose

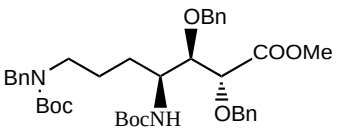
Absolute configuration: (4*S*,5*R*,6*S*)

$C_{38}H_{52}N_2O_7$

1*N*-Benzyl-*N*-(*tert*-butoxycarbonyl)-5,6-di-benzyloxy-7-hydroxy-4-(*tert*-butoxycarbonylamino)-(4*S*,5*R*,6*S*)-heptylamine

S. Chandrasekhar,* T. Ramachandar and B. Venkateswara Rao

Tetrahedron: Asymmetry *12 (2001) 2315*



$[\alpha]_D = -17.2$ ($c = 0.5$, $CHCl_3$)

Source of chirality: D-glucose

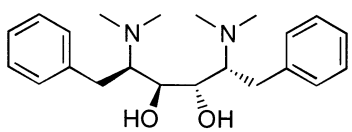
Absolute configuration: (2*R*,3*R*,4*S*)

$C_{39}H_{52}N_2O_8$

Methyl 7-*N*-benzyl-*N*-(*tert*-butoxycarbonyl)-2,3-di(benzyloxy)-4-(*tert*-butoxycarbonylamino)-(2*R*,3*R*,4*S*)-heptanoate

Biao Jiang,* Yan Feng and Jian-Feng Hang

Tetrahedron: Asymmetry *12 (2001) 2323*



$[\alpha]_D^{20} = -4.2$ ($c = 2.4$, $CHCl_3$)

Source of chirality: diastereomerically pure starting material

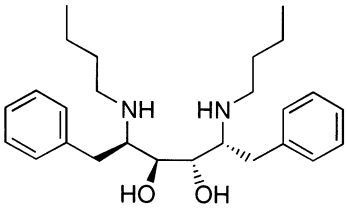
Absolute configuration: (2*R*,3*S*,4*S*,5*R*)

$C_{22}H_{32}N_2O_2$

(2*R*,3*S*,4*S*,5*R*)-*N*,*N*,*N*′,*N*′-Tetramethyl-2,5-diamino-3,4-dihydroxy-1,6-diphenylhexane

Biao Jiang,* Yan Feng and Jian-Feng Hang

Tetrahedron: Asymmetry *12 (2001) 2323*



$C_{26}H_{40}N_2O_2$

(2*R*,3*S*,4*S*,5*R*)-*N*,*N*′-Di-*n*-butyl-2,5-diamino-3,4-dihydroxy-1,6-diphenylhexane

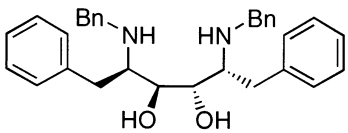
$[\alpha]_D^{20} = -89.3$ ($c = 2.5$, $CHCl_3$)

Source of chirality: diastereomerically pure starting material

Absolute configuration: (2*R*,3*S*,4*S*,5*R*)

Biao Jiang,* Yan Feng and Jian-Feng Hang

Tetrahedron: Asymmetry *12 (2001) 2323*



$C_{30}H_{36}N_2O_2$

(2*R*,3*S*,4*S*,5*R*)-*N*,*N*-Dibenzyl-2,5-diamino-3,4-dihydroxy-1,6-diphenylhexane

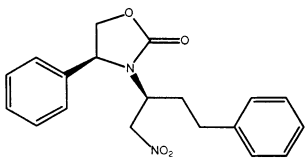
$[\alpha]_D^{20} = -75.3$ ($c = 3.1$, $CHCl_3$)

Source of chirality: diastereomerically pure starting material

Absolute configuration: (2*R*,3*S*,4*S*,5*R*)

Marta Feroci, Achille Inesi,* Laura Palombi* and Leucio Rossi

Tetrahedron: Asymmetry *12 (2001) 2331*



$C_{19}H_{20}N_2O_4$

(4*S*)-Phenyl-3-((*S*)-1′-(nitromethyl)propyl-3′-phenyl)oxazolidin-2-one

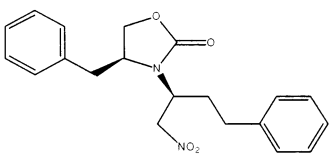
$[\alpha]_D = +62.8$ ($c = 0.70$, $CHCl_3$)

Source of chirality: electrochemically induced conjugate addition

Absolute configuration: (4*S*,1′*S*)

Marta Feroci, Achille Inesi,* Laura Palombi* and Leucio Rossi

Tetrahedron: Asymmetry *12 (2001) 2331*



$C_{20}H_{22}N_2O_4$

(4*S*)-Benzyl-3-((*S*)-1′-(nitromethyl)propyl-3′-phenyl)oxazolidin-2-one

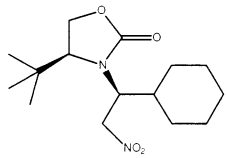
$[\alpha]_D = +29.7$ ($c = 0.875$, $CHCl_3$)

Source of chirality: electrochemically induced conjugate addition

Absolute configuration: (4*S*,1′*S*)

Marta Feroci, Achille Inesi,* Laura Palombi* and Leucio Rossi

Tetrahedron: Asymmetry *12 (2001) 2331*



$C_{15}H_{26}N_2O_4$

(4*S*)-*tert*-Butyl-3-((*S*)-1′-cyclohexyl-2′-nitroethyl)oxazolidin-2-one

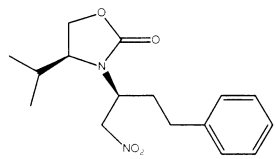
$[\alpha]_D = +52.6$ ($c = 0.57$, $CHCl_3$)

Source of chirality: electrochemically induced conjugate addition

Absolute configuration: (4*S*,1′*S*)

Marta Feroci, Achille Inesi,* Laura Palombi* and Leucio Rossi

Tetrahedron: Asymmetry *12 (2001) 2331*



$C_{16}H_{22}N_2O_4$

(4*S*)-*iso*-Propyl-3-((*S*)-1′-(nitromethyl)propyl-3′-phenyl)oxazolidin-2-one

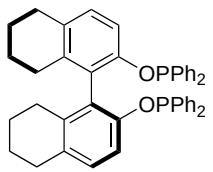
$[\alpha]_D = +45.7$ ($c = 0.70$, $CHCl_3$)

Source of chirality: electrochemically induced conjugate addition

Absolute configuration: (4*S*,1′*S*)

Fu-Yao Zhang, Wai Him Kwok and Albert S. C. Chan*

Tetrahedron: Asymmetry *12 (2001) 2337*



$C_{44}H_{40}O_2P_2$

(*S*)-2,2′-Bis(diphenylphosphino)-5,5′,6,6′,7,7′,8,8′-octahydro-1,1′-binaphthyl

E.e. >99% (from *S*-BINOL)

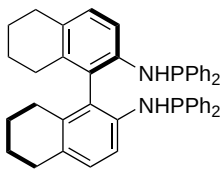
$[\alpha]_D = -82.0$ (*c* 1.0, THF)

Source of chirality: direct synthesis from (*S*)-BINOL

Absolute configuration: *S*

Fu-Yao Zhang, Wai Him Kwok and Albert S. C. Chan*

Tetrahedron: Asymmetry *12 (2001) 2337*



$C_{44}H_{42}N_2P_2$

(*R*)-2,2′-Bis(diphenylphosphinoamino)-5,5′,6,6′,7,7′,8,8′-octahydro-1,1′-binaphthyl

E.e. >99% (from *R*-BINAM)

$[\alpha]_D = -47.0$ (*c* 1.0, CH_2Cl_2)

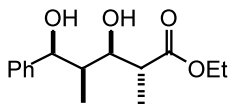
Source of chirality: direct synthesis from (*R*)-BINAM

Absolute configuration: *R*

Syun-ichi Kiyooka,* Kazi A. Shahid, Kazunori Murai, Yong-Nan Li, Momotoshi Okazaki and Yoshihiro Shuto

Tetrahedron: Asymmetry *12 (2001) 2343*

$[\alpha]_D^{22}$ −5.5 (*c* 1.83, $CHCl_3$)
Source of chirality: enantioselective aldol reaction
Absolute configuration: (2*R*,3*R*,4*R*,5*S*)



$C_{15}H_{22}O_4$
Ethyl (2*R*,3*R*,4*R*,5*S*)-3,5-dihydroxy-2,4-dimethyl-5-phenylpentanoate

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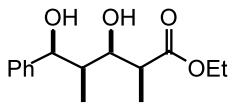
Syun-ichi Kiyooka,* Kazi A. Shahid, Kazunori Murai, Yong-Nan Li, Momotoshi Okazaki and Yoshihiro Shuto

Tetrahedron: Asymmetry *12 (2001) 2343*

$[\alpha]_D^{22}$ −8.3 (*c* 1.08, $CHCl_3$)
Source of chirality: enantioselective aldol reaction
Absolute configuration: (2*S*,3*R*,4*R*,5*S*)



$C_{15}H_{22}O_4$
Ethyl (2*S*,3*R*,4*R*,5*S*)-3,5-dihydroxy-2,4-dimethyl-5-phenylpentanoate

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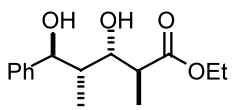
Syun-ichi Kiyooka,* Kazi A. Shahid, Kazunori Murai, Yong-Nan Li, Momotoshi Okazaki and Yoshihiro Shuto

Tetrahedron: Asymmetry *12 (2001) 2343*

$[\alpha]_D^{22}$ −24.0 (*c* 0.25, $CHCl_3$)
Source of chirality: enantioselective aldol reaction
Absolute configuration: (2*S*,3*S*,4*S*,5*S*)



$C_{15}H_{22}O_4$
Ethyl (2*S*,3*S*,4*S*,5*S*)-3,5-dihydroxy-2,4-dimethyl-5-phenylpentanoate

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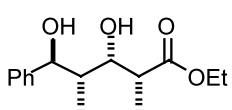
Syun-ichi Kiyooka,* Kazi A. Shahid, Kazunori Murai, Yong-Nan Li, Momotoshi Okazaki and Yoshihiro Shuto

Tetrahedron: Asymmetry *12 (2001) 2343*

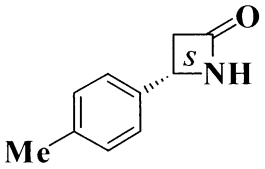
$[\alpha]_D^{22}$ −50.0 (*c* 0.50, $CHCl_3$)
Source of chirality: enantioselective aldol reaction
Absolute configuration: (2*R*,3*S*,4*S*,5*S*)



$C_{15}H_{22}O_4$
Ethyl (2*R*,3*S*,4*S*,5*S*)-3,5-dihydroxy-2,4-dimethyl-5-phenylpentanoate

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{10}H_{11}NO$

(*S*)-4-(*p*-Tolyl-2-azetidinone)

E.e. = 99% by GC on CP-Chirasil-Dex CB column

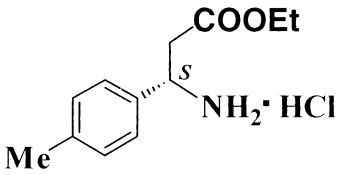
$[\alpha]_D^{25} = -125.5$ ($c = 0.5$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation followed by NH_4OH/MeOH treatment

Absolute configuration: *S*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{12}H_{18}ClNO_2$

Ethyl (*S*)-3-amino-3-(*p*-tolyl)-propionate hydrochloride

E.e. = 97% by GC on Chirasil-*L*-Val column after derivatization with hexanoic anhydride

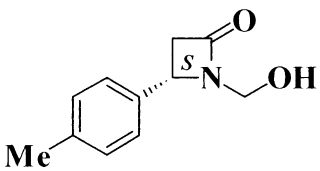
$[\alpha]_D^{25} = +12.9$ ($c = 1.9$, EtOH)

Source of chirality: synthesis from its chiral β-lactam precursor

Absolute configuration: *S*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{11}H_{13}NO_2$

(*S*)-1-Hydroxymethyl-4-(*p*-tolyl)-2-azetidinone

E.e. = 95% by GC on CP-Chirasil-Dex CB column

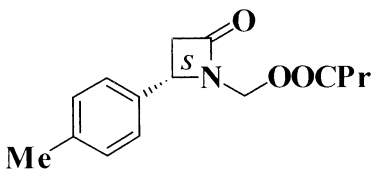
$[\alpha]_D^{25} = -168.0$ ($c = 0.5$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation

Absolute configuration: *S*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{15}H_{19}NO_3$

(*S*)-1-Butyryloxymethyl-4-(*p*-tolyl)-2-azetidinone

E.e. = 97% by GC on CP-Chirasil-Dex CB column

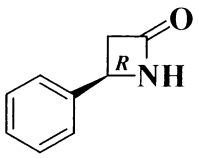
$[\alpha]_D^{25} = -62$ ($c = 1$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation

Absolute configuration: *S*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



C_9H_9NO

(*R*)-4-Phenyl-2-azetidinone

E.e. = 97% by GC on CP-Chirasil-Dex CB column

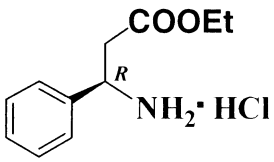
$[\alpha]_D^{25} = +132.4$ ($c = 0.5$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation followed by NH_4OH/MeOH treatment

Absolute configuration: *R*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{11}H_{16}ClNO_2$

Ethyl (*R*)-3-amino-3-phenylpropionate hydrochloride

E.e. = 95% by GC on Chirasil-*L*-Val column after derivatization with hexanoic anhydride

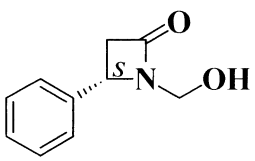
$[\alpha]_D^{25} = -11.4$ ($c = 0.35$, EtOH)

Source of chirality: synthesis from its chiral β-lactam precursor

Absolute configuration: *R*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{10}H_{11}NO_2$

(*S*)-1-Hydroxymethyl-4-phenyl-2-azetidinone

E.e. = 98% by GC on CP-Chirasil-Dex CB column

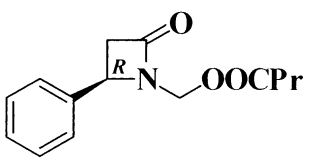
$[\alpha]_D^{25} = -166.7$ ($c = 1$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation

Absolute configuration: *S*

Enikő Forró and Ferenc Fülöp*

Tetrahedron: Asymmetry *12 (2001) 2351*



$C_{14}H_{17}NO_3$

(*R*)-1-Butyryloxymethyl-4-phenyl-2-azetidinone

E.e. = 97% by GC on CP-Chirasil-Dex CB column

$[\alpha]_D^{25} = +61.4$ ($c = 1$, EtOH)

Source of chirality: lipase PS-catalyzed butyrylation

Absolute configuration: *R*