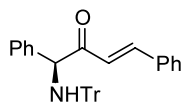


Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



$C_{35}H_{29}NO$

(1*S*,3*E*)-1,4-Diphenyl-1-(tritylamino)-but-3-en-2-one

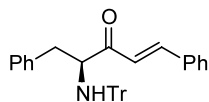
$[\alpha]_D^{25} = +138.5$ (*c* 0.73, $CHCl_3$)

Source of chirality: L-phenylglycine

Absolute configuration: 1*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



$C_{36}H_{31}NO$

(4*S*,1*E*)-1,5-Diphenyl-4-(tritylamino)-pent-1-en-3-one

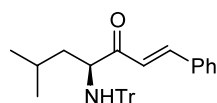
$[\alpha]_D^{25} = +88.4$ (*c* 0.56, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: 4*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



$C_{33}H_{33}NO$

(4*S*,1*E*)-6-Methyl-1-phenyl-4-(tritylamino)-hept-1-en-3-one

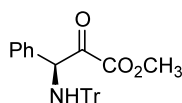
$[\alpha]_D^{25} = +119.2$ (*c* 0.97, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 4*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



$C_{29}H_{25}NO_3$

(3*S*)-2-Oxo-3-phenyl-3-(tritylamino)-propionic acid methyl ester

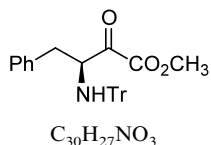
$[\alpha]_D^{25} = +252.6$ (*c* 1.04, $CHCl_3$)

Source of chirality: L-phenylglycine

Absolute configuration: 3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



(3*S*)-2-Oxo-4-phenyl-3-(tritylamino)-butyric acid methyl ester

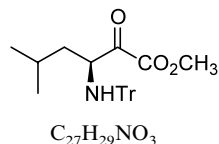
$[\alpha]_D^{25} = +117.0$ (*c* 0.56, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: 3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



(3*S*)-5-Methyl-2-oxo-3-(tritylamino)-hexanoic acid methyl ester

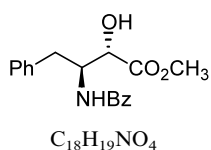
$[\alpha]_D^{25} = +77.5$ (*c* 0.52, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



Methyl (2*S*,3*S*)-3-benzoylamino-2-hydroxy-4-phenylbutanoate

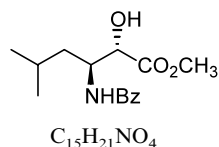
$[\alpha]_D^{25} = -14.6$ (*c* 0.56, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: 2*S*,3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



Methyl (2*S*,3*S*)-3-benzoylamino-2-hydroxy-5-methylhexanoate

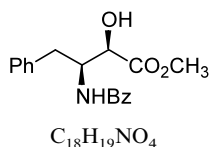
$[\alpha]_D^{25} = -9.8$ (*c* 0.46, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 2*S*,3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



Methyl (2*R*,3*S*)-3-benzoylamino-2-hydroxy-4-phenylbutanoate

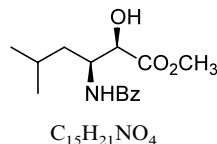
$[\alpha]_D^{25} = -89.5$ (*c* 0.35, $CHCl_3$)

Source of chirality: L-phenylalanine

Absolute configuration: 2*R*,3*S* (assigned by chemical correlation)

Jae-Mok Lee, Hyun-Suk Lim, Kyung-Chang Seo
and Sung-Kee Chung*

Tetrahedron: Asymmetry 14 (2003) 3639



Methyl (2*R*,3*S*)-3-benzoylamino-2-hydroxy-5-methylhexanoate

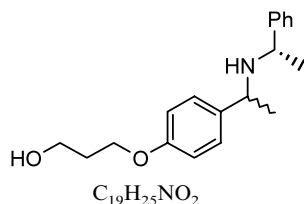
$[\alpha]_D^{25} = -53.1$ (*c* 0.40, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 2*R*,3*S* (assigned by chemical correlation)

Alessandro Mandoli, Massimo Calamante, Ben L. Feringa
and Piero Salvadori*

Tetrahedron: Asymmetry 14 (2003) 3647



(*S*)-*N*-{1-[4-(3-Hydroxypropoxy)phenyl]ethyl}-(*S*)-1-phenylethylamine

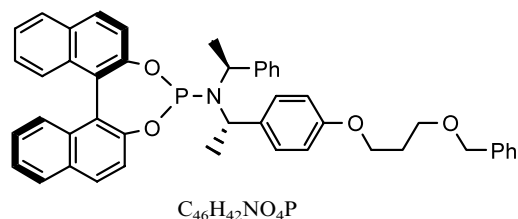
(*S,S*):(*R,S*)=90:10

$[\alpha]_D^{30} = -176$ (*c* 1.00, $CHCl_3$)

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

Alessandro Mandoli, Massimo Calamante, Ben L. Feringa
and Piero Salvadori*

Tetrahedron: Asymmetry 14 (2003) 3647



(*S*)-*N*-(1-phenylethyl)-(*S*)-*N*-{1-[4-(3-hydroxypropoxy)phenyl]ethyl}-(*R*)-dinaphtho[2,1-*d*:1',2'-*f*][1,3,2]dioxaphosphepin-4-amine

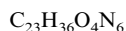
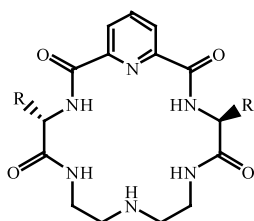
(*aR,S,S*): (*aR,R,S*)=92:8

$[\alpha]_D^{30} = -321$ (*c* 0.47, CH_2Cl_2)

Source of chirality: (*R*)-1,1'-bi(2-naphthol)

Can-Ping Du, Jing-Song You, Xiao-Qi Yu,* Chang-Lu Liu,
Jing-Bo Lan and Ru-Gang Xie*

Tetrahedron: Asymmetry 14 (2003) 3651



(4*S*,14*S*)-4,14-diisobutyl-2,5,13,16-tetraoxo-3,6,9,12,15,21-hexaazabicyclo[15.3.1]heneicosa-1(21),17,19-triene

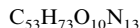
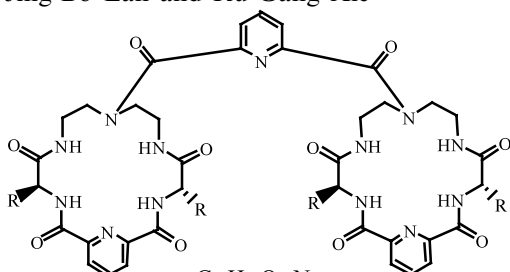
$[\alpha]_D^{25} = -9.2$ (*c* 1.0, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 4*S*,14*S*

Can-Ping Du, Jing-Song You, Xiao-Qi Yu,* Chang-Lu Liu,
Jing-Bo Lan and Ru-Gang Xie*

Tetrahedron: Asymmetry 14 (2003) 3651



Bis{9-[(4*S*,14*S*)-4,14-diisobutyl-2,5,13,16-tetraoxo-3,6,9,12,15,21-hexaazabicyclo[1.5.3.1]heneicosa-1(21),17,19-triene]}-2',6'-dicarbonylpyridine

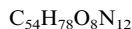
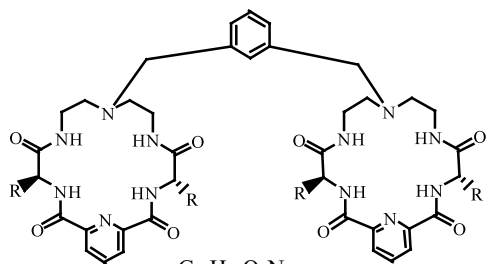
$[\alpha]_D^{25} = -15.1$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 4*S*,14*S*,4'*S*,14'*S*

Can-Ping Du, Jing-Song You, Xiao-Qi Yu,* Chang-Lu Liu,
Jing-Bo Lan and Ru-Gang Xie*

Tetrahedron: Asymmetry 14 (2003) 3651



Bis{9-[(4*S*,14*S*)-4,14-diisobutyl-2,5,13,16-tetraoxo-3,6,9,12,15,21-hexaazabicyclo[1.5.3.1]heneicosa-1(21),17,19-triene]}-1',3'-dimethylbenzene

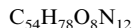
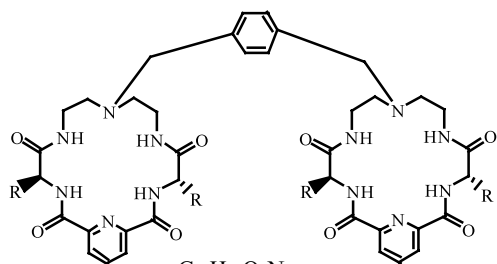
$[\alpha]_D^{25} = +28.8$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 4*S*,14*S*,4'*S*,14'*S*

Can-Ping Du, Jing-Song You, Xiao-Qi Yu,* Chang-Lu Liu,
Jing-Bo Lan and Ru-Gang Xie*

Tetrahedron: Asymmetry 14 (2003) 3651



Bis{9-[(4*S*,14*S*)-4,14-diisobutyl-2,5,13,16-tetraoxo-3,6,9,12,15,21-hexaazabicyclo[1.5.3.1]heneicosa-1(21),17,19-triene]}-1',4'-dimethylbenzene

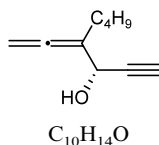
$[\alpha]_D^{25} = +20.0$ (*c* 0.5, $CHCl_3$)

Source of chirality: L-leucine

Absolute configuration: 4*S*,14*S*,4'*S*,14'*S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*S*)-(+)-4-(*n*-Butyl)hexa-4,5-dien-1-yn-3-ol

Ee >99%

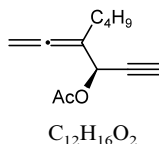
$[\alpha]_D^{20} = +52.5$ (*c* 2.05, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*R*)-(+)-4-(*n*-Butyl)hexa-4,5-dien-1-yn-3-yl acetate

Ee = 97%

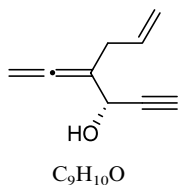
$[\alpha]_D^{20} = +31.7$ (*c* 2.95, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*S*)-(+)-4-Allylhexa-4,5-dien-1-yn-3-ol

Ee = 88%

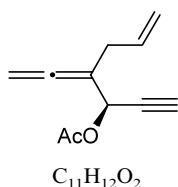
$[\alpha]_D^{20} = +15.0$ (*c* 2.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*R*)-(+)-4-Allylhexa-4,5-dien-1-yn-3-yl acetate

Ee = 98%

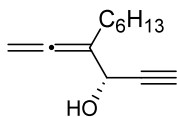
$[\alpha]_D^{20} = +34.8$ (*c* 2.60, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{12}H_{18}O$

(*S*)-(+)-4-(*n*-Hexyl)hexa-4,5-dien-1-yn-3-ol

Ee = 97%

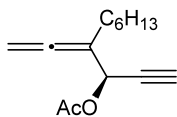
$[\alpha]_D^{20} = +41.6$ (c 1.80, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{14}H_{20}O_2$

(*R*)-(+)-4-(*n*-Hexyl)hexa-4,5-dien-1-yn-3-yl acetate

Ee > 99%

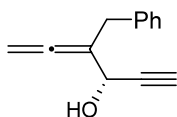
$[\alpha]_D^{20} = +26.2$ (c 2.65, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{13}H_{12}O$

(*S*)-(+)-4-(Benzyl)hexa-4,5-dien-1-yn-3-ol

Ee > 99%

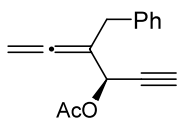
$[\alpha]_D^{20} = +25.1$ (c 1.45, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{15}H_{14}O_2$

(*R*)-(+)-4-(Benzyl)hexa-4,5-dien-1-yn-3-yl acetate

Ee = 98%

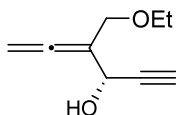
$[\alpha]_D^{20} = +63.4$ (c 2.30, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_9H_{12}O_2$

(*S*)-(-)-4-(Ethoxymethyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

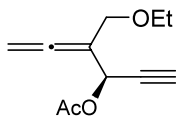
$[\alpha]_D^{20} = -66.6$ (*c* 1.80, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{11}H_{14}O_3$

(*R*)-(+)-4-(Ethoxymethyl)hexa-4,5-dien-1-yn-3-yl acetate

Ee = 98%

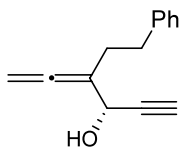
$[\alpha]_D^{20} = +2.4$ (*c* 1.65, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{14}H_{14}O$

(*S*)-(+)-4-(2'-Phenylethyl)hexa-4,5-dien-1-yn-3-ol

Ee > 99%

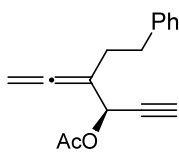
$[\alpha]_D^{20} = +18.7$ (*c* 1.90, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{16}H_{16}O_2$

(*R*)-(+)-4-(2'-Phenylethyl)hexa-4,5-dien-1-yn-3-yl acetate

Ee > 99%

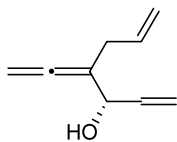
$[\alpha]_D^{20} = +36.0$ (*c* 2.80, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_9H_{12}O$

(*S*)-(+)-4-Allylhexa-1,4,5-trien-3-ol

Ee >99%

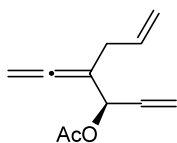
$[\alpha]_D^{20} = +71.3$ (c 1.85, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{11}H_{14}O_2$

(*R*)-(+)-4-Allylethylhexa-1,4,5-dien-3-yl acetate

Ee = 98%

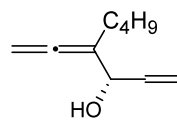
$[\alpha]_D^{20} = +52.9$ (c 3.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{10}H_{16}O$

(*S*)-(+)-4-(*n*-Butyl)hexa-1,4,5-trien-3-ol

Ee = 98%

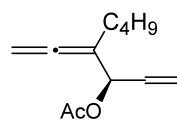
$[\alpha]_D^{20} = +60.7$ (c 2.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{12}H_{18}O_2$

(*R*)-(+)-4-(*n*-Butyl)hexa-1,4,5-dien-3-yl acetate

Ee = 98%

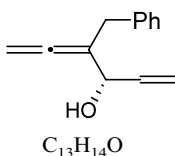
$[\alpha]_D^{20} = +39.9$ (c 2.85, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*S*)-(+)-4-(Benzy)hexa-1,4,5-trien-3-ol

Ee >99%

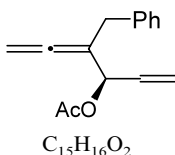
$[\alpha]_D^{20} = +69.2$ (c 2.15, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*R*)-(+)-4-(Benzy)hexa-1,4,5-dien-3-yl acetate

Ee >99%

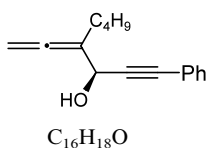
$[\alpha]_D^{20} = +78.8$ (c 2.40, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*R*)-(-)-1-Phenyl-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

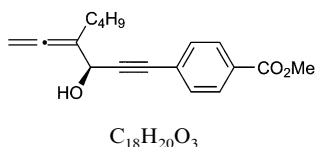
$[\alpha]_D^{20} = -27.2$ (c 1.85, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



(*R*)-(-)-1-(4'-Methoxycarbonylphenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 99%

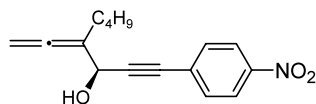
$[\alpha]_D^{20} = -39.9$ (c 1.45, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{16}H_{17}NO_3$

(*R*)-(-)-1-(4'-Nitrophenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 99%

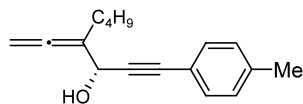
$[\alpha]_D^{20} = -50.1$ (c 1.25, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{17}H_{20}O$

(*S*)-(+)-1-(4'-Methylphenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

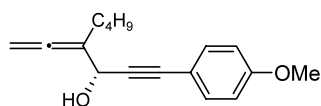
$[\alpha]_D^{20} = +81.5$ (c 2.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{17}H_{20}O_2$

(*S*)-(+)-1-(4'-Methoxyphenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

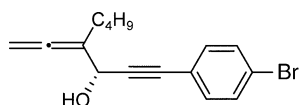
$[\alpha]_D^{20} = +32.1$ (c 2.40, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{16}H_{17}BrO$

(*S*)-(+)-1-(4'-Bromophenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

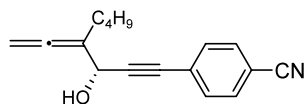
$[\alpha]_D^{20} = +65.7$ (c 2.50, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{17}H_{17}NO$

(*S*)-(+)-1-(4'-Cyanophenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 98%

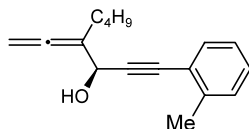
$[\alpha]_D^{20} = +54.7$ (*c* 0.90, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{17}H_{20}O$

(*R*)-(-)-1-(2'-Methylphenyl)-4-(*n*-butyl)hexa-4,5-dien-1-yn-3-ol

Ee = 97%

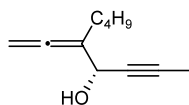
$[\alpha]_D^{20} = -23.4$ (*c* 4.75, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Daiwang Xu, Zuyi Li and Shengming Ma*

Tetrahedron: Asymmetry 14 (2003) 3657



$C_{11}H_{16}O$

(*S*)-(+)-(*n*-Butyl)hepta-1,2-dien-5-yn-4-ol

Ee = 98%

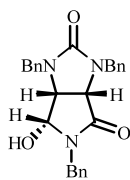
$[\alpha]_D^{20} = +49.6$ (*c* 1.00, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Fen-Er Chen,* Hui-Fang Dai, Yun-Yan Kuang and Hui-Qing Jia

Tetrahedron: Asymmetry 14 (2003) 3667



$C_{26}H_{25}N_3O_3$

(3*aS*,6*R*,6*aR*)-1,3,5-Tribenzyl-6-hydroxy-tetrahydro-4*H*-pyrrolo[3,4-*d*]imidazole-2,4-(1*H*)-dione

E.e. = 98%

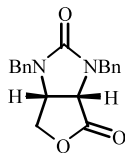
$[\alpha]_D^{20} = +68.9$ (*c* 0.1, CH_2Cl_2)

Source of chirality: enantioselective reduction

Absolute configuration: (3*aS*,6*R*,6*aR*)

Fen-Er Chen,* Hui-Fang Dai, Yun-Yan Kuang and Hui-Qing Jia

Tetrahedron: Asymmetry 14 (2003) 3667



(3*aS*,6*aR*)-1,3-Dibenzyl-tetrahydro-4*H*-furo [3,4-*d*]imidazole-2,4-(1*H*)-dione

E.e. >99%

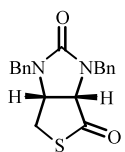
$[\alpha]_D^{20} = +61.5$ (c 2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,6*aR*)

Fen-Er Chen,* Hui-Fang Dai, Yun-Yan Kuang and Hui-Qing Jia

Tetrahedron: Asymmetry 14 (2003) 3667



(3*aS*,6*aR*)-1,3-Dibenzyl-tetrahydro-4*H*-thieno [3,4-*d*]imidazole-2,4(1*H*)-dione

E.e. = 99.1%

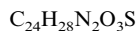
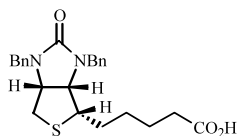
$[\alpha]_D^{20} = +90.4$ (c 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,6*aR*)

Fen-Er Chen,* Hui-Fang Dai, Yun-Yan Kuang and Hui-Qing Jia

Tetrahedron: Asymmetry 14 (2003) 3667



(3*aS*,4*S*,6*aR*)-1,3-Dibenzyl-tetrahydro-1*H*-thieno [3,4-*d*] imidazole-2(3*H*)-one-4-ylpentanoic acid

E.e. = 98.9%

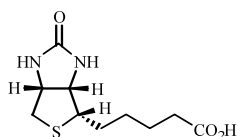
$[\alpha]_D^{23} = -26.7$ (c 1, CH_3OH)

Source of chirality: enantioselective reduction

Absolute configuration: (3*aS*,4*S*,6*aR*)

Fen-Er Chen,* Hui-Fang Dai, Yun-Yan Kuang and Hui-Qing Jia

Tetrahedron: Asymmetry 14 (2003) 3667



d-Biotin

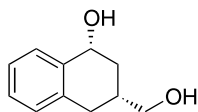
$[\alpha]_D^{22} = +91.1$ (c 1, 0.1 M NaOH)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*aS*,4*S*,6*aR*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(1*R*,3*R*)-3-Hydroxymethyl-1,2,3,4-tetrahydronaphthalen-1-ol

E.e. = 99.9%

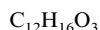
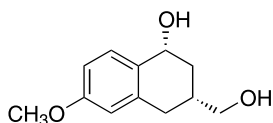
$[\alpha]_D^{20} = -104$ (*c* 1.0, EtOAc)

Source of chirality: oxidative kinetic resolution

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

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(1*R*,3*R*)-3-Hydroxymethyl-6-methoxy-1,2,3,4-tetrahydronaphthalen-1-ol

E.e. = 99.9%

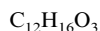
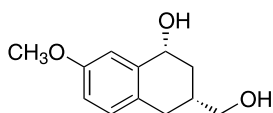
$[\alpha]_D^{20} = -97.3$ (*c* 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

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

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(1*R*,3*R*)-3-Hydroxymethyl-7-methoxy-1,2,3,4-tetrahydronaphthalen-1-ol

E.e. = 80%

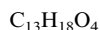
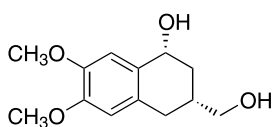
$[\alpha]_D^{20} = -94$ (*c* 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

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

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(1*R*,3*R*)-6,7-Dimethoxy-3-hydroxymethyl-1,2,3,4-tetrahydronaphthalen-1-ol

E.e. = 99.9%

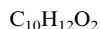
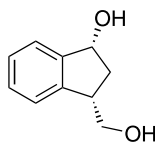
$[\alpha]_D^{20} = -98$ (*c* 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

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

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(1*R*,3*S*)-3-Hydroxymethylindan-1-ol

E.e. = 85%

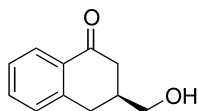
$[\alpha]_D^{20} = -13.6$ (c 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

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

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-3-Hydroxymethyl-1,2,3,4-tetrahydronaphthalen-1-one

E.e. = 99.9%

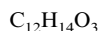
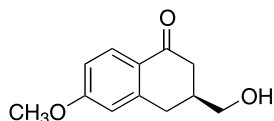
$[\alpha]_D^{20} = +28.5$ (c 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

Absolute configuration: (*S*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-3-Hydroxymethyl-6-methoxy-1,2,3,4-tetrahydronaphthalen-1-one

E.e. = 99.9%

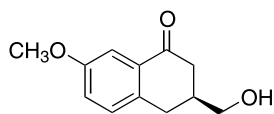
$[\alpha]_D^{20} = +37.0$ (c 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

Absolute configuration: (*S*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-3-Hydroxymethyl-7-methoxy-1,2,3,4-tetrahydronaphthalen-1-one

E.e. = 99.9%

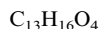
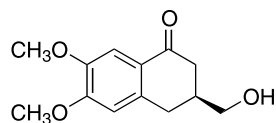
$[\alpha]_D^{20} = +35.3$ (c 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

Absolute configuration: (*S*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-6,7-Dimethoxy-3-hydroxymethyl-7-methoxy-1,2,3,4-tetrahydronaphthalen-1-one

E.e. = 99.9%

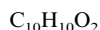
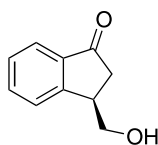
$[\alpha]_D^{20} = +53.1$ (*c* 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

Absolute configuration: (*S*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*R*)-3-Hydroxymethyl-1-indanone

E.e. = 90%

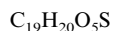
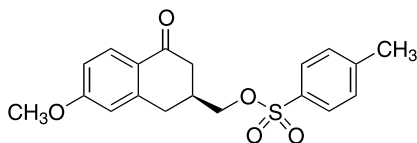
$[\alpha]_D^{20} = +14$ (*c* 0.5, EtOAc)

Source of chirality: oxidative kinetic resolution

Absolute configuration: (*R*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-(6-Methoxy-4-oxo-1,2,3,4-tetrahydronaphthalen-2-yl)methyl 4-methylbenzenesulfonate

E.e. = 99.9%

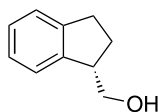
$[\alpha]_D^{20} = +9.2$ (*c* 0.5, EtOAc)

Source of chirality: chiral precursor

Absolute configuration: (*S*)

Yolanda Caro, María Torrado, Christian F. Masaguer*
and Enrique Raviña

Tetrahedron: Asymmetry 14 (2003) 3689



(*S*)-1-Indanylmethanol

E.e. = 85%

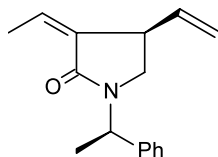
$[\alpha]_D^{20} = -14.3$ (*c* 1.0, benzene)

Source of chirality: chiral precursor

Absolute configuration: (*S*)

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



$C_{16}H_{19}NO$

(*Z,4R,1'R*)-4-Etenyl-2-ethylene-1-(1'-phenylethyl)pyrrolidin-2-one

Ee >98%

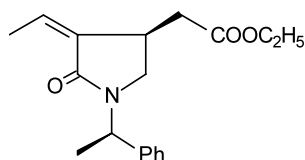
$[\alpha]_D^{20} = +188.1$ (*c* 4.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *Z,4R,1'R*

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



$C_{18}H_{23}NO_3$

(*Z,4R,1'R*)-4-Ethoxycarbonylmethyl-2-ethylene-1-(1'-phenylethyl)pyrrolidin-2-one

Ee >98%

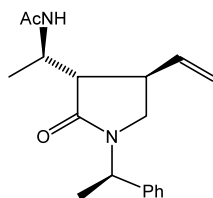
$[\alpha]_D^{20} = +74.3$ (*c* 4.2, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *Z,4R,1'R*

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



$C_{18}H_{24}N_2O_2$

(*3S,4R,1'R,1''*)-3-(1''-Acetylaminoeth-1''-yl)-4-ethenyl-1-(1'-phenylethyl)pyrrolidin-2-one

Ee >98%

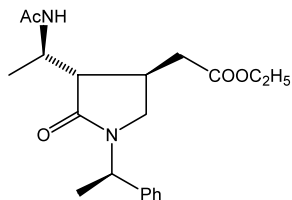
$[\alpha]_D^{20} = +91.4$ (*c* 0.5, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



$C_{20}H_{28}N_2O_4$

Ethyl (*3S,4R,1'R,1''*) 3-(1''-acetylaminoeth-1''-yl)-1-(1'-phenylethyl)-2-oxopyrrolidin-4-yl]acetate

Ee >98%

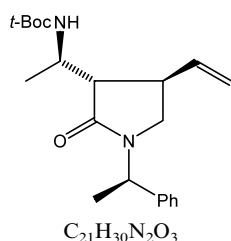
$[\alpha]_D^{20} = +81.4$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



(3*S*,4*R*,1'*R*,1''*R*) 3-(1''-*t*-Butoxycarbonylaminoeth-1''-yl)-4-ethenyl-1-(1'-phenylethyl)pyrrolidin-2-one

Ee >98%

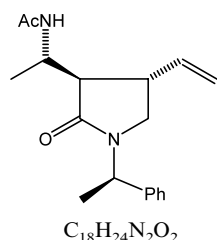
$[\alpha]_D^{20} = +74.4$ (*c* 0.5, CHCl₃)

Source of chirality: asymmetric synthesis

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



(3*R*,4*S*,1'*R*,1''*S*)-3-(1''-Acetylaminoeth-1''-yl)-4-ethenyl-1-(1'-phenylethyl)pyrrolidin-2-one

Ee >98%

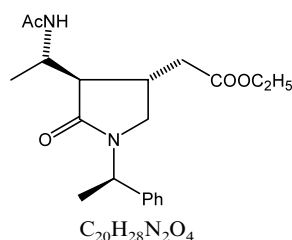
$[\alpha]_D^{20} = +98.3$ (*c* 0.4, CHCl₃)

Source of chirality: asymmetric synthesis

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

Cristiana Fava, Roberta Galeazzi, Giovanna Mobbili
and Mario Orena*

Tetrahedron: Asymmetry 14 (2003) 3697



Ethyl (3*R*,4*S*,1'*R*,1''*S*)-3-(1''-acetylaminoeth-1''-yl)-1-(1'-phenylethyl)-2-oxopyrrolidin-4-yl]acetate

Ee >98%

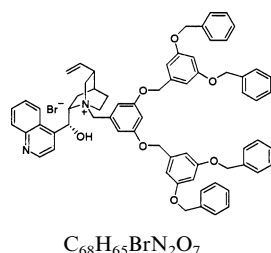
$[\alpha]_D^{20} = +76.5$ (*c* 1, CHCl₃)

Source of chirality: asymmetric synthesis

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

Gabriela Guillena, Robert Kreiter, Rob van de Coevering,
Robertus J. M. Klein Gebbink, Gerard van Koten,* Patricia Mazón,
Rafael Chinchilla and Carmen Nájera*

Tetrahedron: Asymmetry 14 (2003) 3705



N-Bis-3,5-[(3',5'-di(benzyloxy)phenyl)methoxy]benzylcinchonidinium bromide

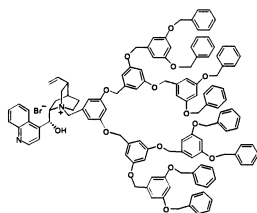
E.e. = 100%

$[\alpha]_D^{25} = -98$ (*c* 1, CHCl₃)

Source of chirality: synthesis from (–)-cinchonidine

Gabriela Guillena, Robert Kreiter, Rob van de Coevering,
Robertus J. M. Klein Gebbink, Gerard van Koten,* Patricia Mazón,
Rafael Chinchilla and Carmen Nájera*

Tetrahedron: Asymmetry 14 (2003) 3705



$C_{124}H_{113}BrN_2O_{15}$

N-Tris-{3,5-[bis-3',5'-(3'',5''-di(benzyloxy)phenylmethoxy)]benzylcinchonidinium bromide

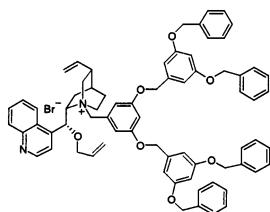
E.e. = 100%

$[\alpha]_D^{25} = -29$ (c 1, $CHCl_3$)

Source of chirality: synthesis from (–)-cinchonidine

Gabriela Guillena, Robert Kreiter, Rob van de Coevering,
Robertus J. M. Klein Gebbink, Gerard van Koten,* Patricia Mazón,
Rafael Chinchilla and Carmen Nájera*

Tetrahedron: Asymmetry 14 (2003) 3705



$C_{71}H_{69}BrN_2O_7$

O-Allyl-*N*-bis-3,5-[(3',5'-di(benzyloxy)phenylmethoxy)]benzylcinchonidinium bromide

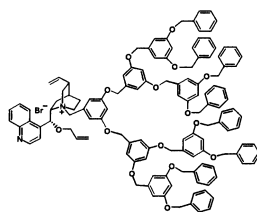
E.e. = 100%

$[\alpha]_D^{25} = -73$ (c 1, $CHCl_3$)

Source of chirality: synthesis from (–)-cinchonidine

Gabriela Guillena, Robert Kreiter, Rob van de Coevering,
Robertus J. M. Klein Gebbink, Gerard van Koten,* Patricia Mazón,
Rafael Chinchilla and Carmen Nájera*

Tetrahedron: Asymmetry 14 (2003) 3705



$C_{127}H_{117}BrN_2O_{15}$

O-Allyl-*N*-tris-{3,5-[bis-3',5'-(3'',5''-di(benzyloxy)phenylmethoxy)]benzylcinchonidinium bromide

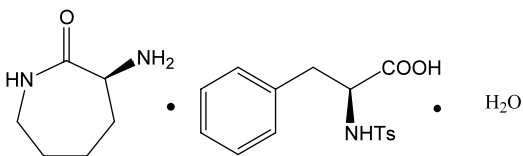
E.e. = 100%

$[\alpha]_D^{25} = -16$ (c 1, $CHCl_3$)

Source of chirality: synthesis from (–)-cinchonidine

Kenichi Sakai,* Rumiko Sakurai, Atsushi Yuzawa
and Noriaki Hirayama

Tetrahedron: Asymmetry 14 (2003) 3713



$C_{22}H_{29}N_3O_5 \cdot H_2O$

(*S*)- α -Amino- ϵ -caprolactam/*N*-tosyl-(*S*)-phenylalanine/ H_2O

De >99.9%

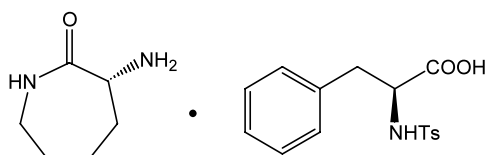
$[\alpha]_D^{25} +20.7$ (c 0.104, EtOH)

Source of chirality: resolution with chiral acid

Absolute configuration: (*S*)(*S*)

Kenichi Sakai,* Rumiko Sakurai, Atsushi Yuzawa
and Noriaki Hirayama

Tetrahedron: Asymmetry 14 (2003) 3713



$C_{22}H_{29}N_3O_3S$

(*R*)- α -Amino- ϵ -caprolactam/*N*-tosyl-(*S*)-phenylalanine

De 98.9%

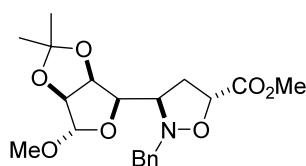
$[\alpha]_D^{22} = +30.5$ (*c* 0.106, EtOH)

Source of chirality: resolution with chiral acid

Absolute configuration: (*R*)(*S*)

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



$C_{20}H_{27}NO_7$

4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-*lyxo*-tetrofuranose

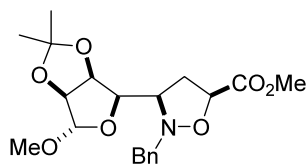
$[\alpha]_D^{25} = +113$ (*c* 1.21, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



$C_{20}H_{27}NO_7$

4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-*lyxo*-tetrofuranose

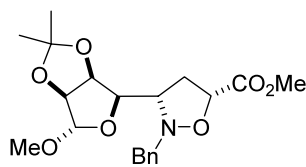
$[\alpha]_D^{25} = +24$ (*c* 0.12, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*R*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



$C_{20}H_{27}NO_7$

4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-*lyxo*-tetrofuranose

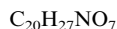
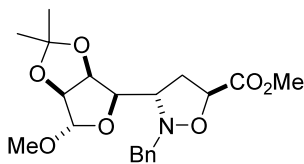
$[\alpha]_D^{25} = -35$ (*c* 0.75, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*S*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-2,3-O-isopropyliden-1-O-methyl- α -D-lyxo-tetrofuranose

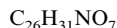
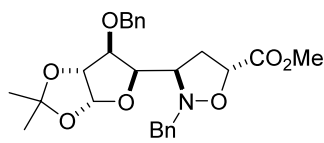
$[\alpha]_D^{25} = -168$ (c 0.35, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'S,2'S,3'S,4'R,3S,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-3-O-benzyl-1,2-O-isopropyliden- α -D-xylo-tetrofuranose

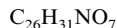
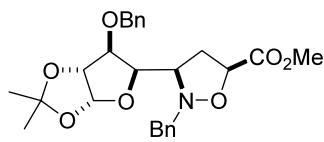
$[\alpha]_D^{25} = -21$ (c 1.25, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'R,2'R,3'S,4'R,3R,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-3-O-benzyl-1,2-O-isopropyliden- α -D-xylo-tetrofuranose

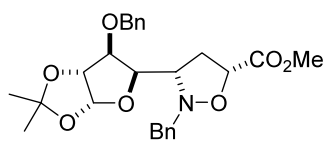
$[\alpha]_D^{25} = -4$ (c 0.75, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'R,2'R,3'S,4'R,3R,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-3-O-benzyl-1,2-O-isopropyliden- α -D-xylo-tetrofuranose

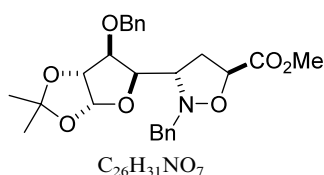
$[\alpha]_D^{25} = -97$ (c 0.70, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'R,2'R,3'S,4'R,3S,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-3-O-benzyl-1,2-O-isopropyliden- α -D-xylotetrofuranose

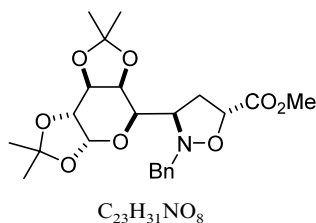
$[\alpha]_D^{25} = -67$ (c 0.95, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'R,2'R,3'S,4'R,3S,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galactopentopyranose

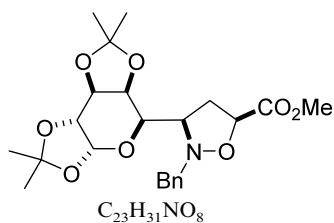
$[\alpha]_D^{25} = -82$ (c 0.40, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3R,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galactopentopyranose

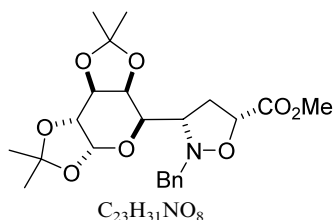
$[\alpha]_D^{25} = -26$ (c 0.40, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3R,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galactopentopyranose

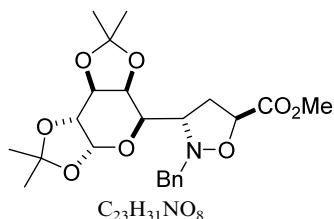
$[\alpha]_D^{25} = -55$ (c 0.90, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3S,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[2-Benzyl-5-(methoxycarbonyl)-3-isoxazolidinyl]-1,2:3,4-di-*O*-isopropyliden- α -D-galacto-pentopyranose

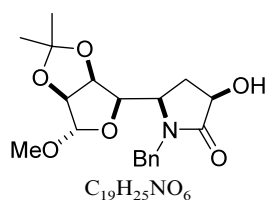
$[\alpha]_D^{25} = -38$ (*c* 1.25, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*S*,5'*R*,3*S*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-lyxo-tetrofuranose

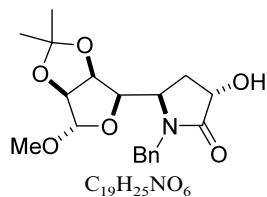
$[\alpha]_D^{25} = +88$ (*c* 0.25, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-lyxo-tetrofuranose

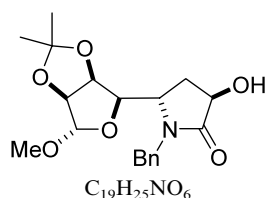
$[\alpha]_D^{25} = +79$ (*c* 0.71, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*S*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-lyxo-tetrofuranose

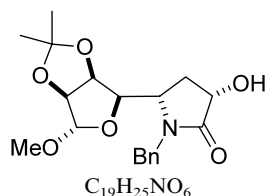
$[\alpha]_D^{25} = +176$ (*c* 0.62, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*R*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-*lyxo*-tetrofuranose

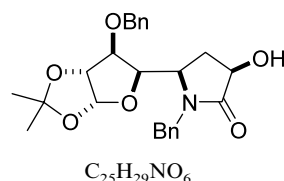
$[\alpha]_D^{25} = +46$ (*c* 0.30, $CHCl_3$)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*S*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-3-*O*-benzyl-1,2-*O*-isopropyliden- α -D-*xylo*-tetrofuranose

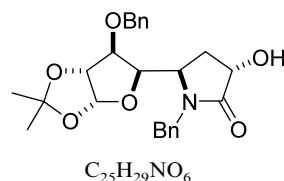
$[\alpha]_D^{25} = -22$ (*c* 0.88, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-3-*O*-benzyl-1,2-*O*-isopropyliden- α -D-*xylo*-tetrofuranose

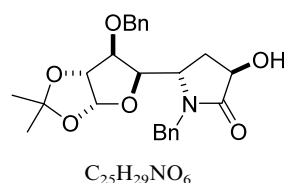
$[\alpha]_D^{25} = -86$ (*c* 0.64, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*R*,3*S*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-3-*O*-benzyl-1,2-*O*-isopropyliden- α -D-*xylo*-tetrofuranose

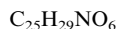
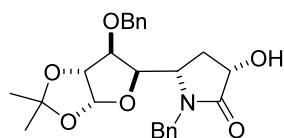
$[\alpha]_D^{25} = +24$ (*c* 0.34, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*R*,3*R*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-3-O-benzyl-1,2-O-isopropyliden- α -D-xylo-tetrafuranose

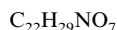
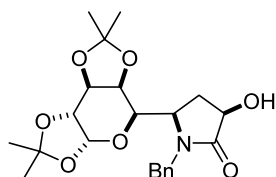
$[\alpha]_D^{25} = -29$ (c 0.81, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: 1'R,2'R,3'S,4'R,3S,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galacto-pentopyranose

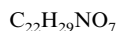
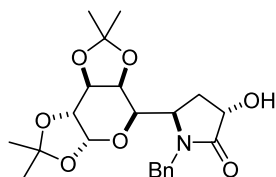
$[\alpha]_D^{25} = +47$ (c 0.40, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3R,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galacto-pentopyranose

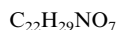
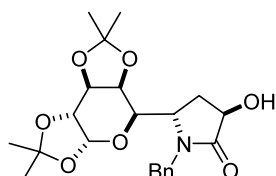
$[\alpha]_D^{25} = -115$ (c 0.35, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3S,5R

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-O-isopropyliden- α -D-galacto-pentopyranose

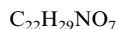
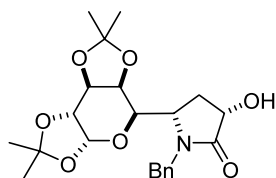
$[\alpha]_D^{25} = +35$ (c 0.45, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'R,2'R,3'S,4'S,5'R,3R,5S

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[1-Benzyl-3-hydroxy-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-*O*-isopropyliden- α -D-*galacto*-pentopyranose

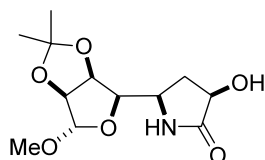
$[\alpha]_D^{25} = -10$ (*c* 1.02, CHCl_3)

Source of chirality: D-galactose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*S*,5'*R*,3*S*,5*S*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[3-Hydroxy-2-oxo-5-pyrrolidinyl]-2,3-*O*-isopropyliden-1-*O*-methyl- α -D-*lyxo*-tetrofuranose

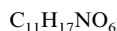
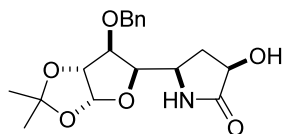
$[\alpha]_D^{25} = +18$ (*c* 0.32, CHCl_3)

Source of chirality: D-ribose

Absolute configuration: 1'*S*,2'*S*,3'*S*,4'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



4-[3-Hydroxy-2-oxo-5-pyrrolidinyl]-3-*O*-Benzyl-1,2-*O*-isopropyliden- α -D-*xylo*-tetrofuranose

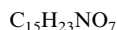
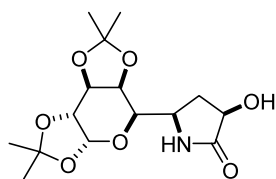
$[\alpha]_D^{25} = +53$ (*c* 0.75, CHCl_3)

Source of chirality: D-glucose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



5-[3-Hydroxy-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-*O*-isopropyliden- α -D-*galacto*-pentopyranose

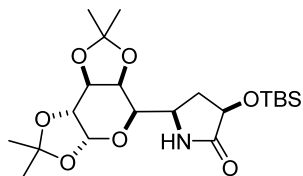
$[\alpha]_D^{25} = -29$ (*c* 0.65, CHCl_3)

Source of chirality: D-galactose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*S*,5'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



$C_{21}H_{37}NO_7Si$

5-[3-(*tert*-Butyldimethylsiloxy)-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-*O*-isopropyliden- α -D-galacto-pentopyranose

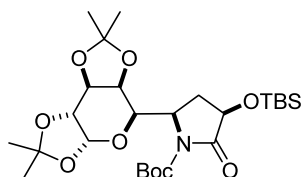
$[\alpha]_D^{25} = -52$ (*c* 0.15, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*S*,5'*R*,3*R*,5*R*

Pedro Merino,* Santiago Franco, Francisco L. Merchan,
Pilar Romero, Tomas Tejero and Santiago Uriel

Tetrahedron: Asymmetry 14 (2003) 3731



$C_{26}H_{45}NO_9Si$

5-[1-(*tert*-Butoxycarbonyl)-3-(*tert*-butyldimethylsiloxy)-2-oxo-5-pyrrolidinyl]-1,2:3,4-di-*O*-isopropyliden- α -D-galacto-pentopyranose

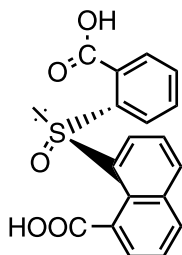
$[\alpha]_D^{25} = -22$ (*c* 0.10, $CHCl_3$)

Source of chirality: D-galactose

Absolute configuration: 1'*R*,2'*R*,3'*S*,4'*S*,5'*R*,3*R*,5*R*

Jenő Varga, József Rábai, Ferenc Ruff,* Árpád Kucsman,
Elemér Vass, Miklós Hollósi and Dénes Szabó*

Tetrahedron: Asymmetry 14 (2003) 3745



$C_{18}H_{12}O_5S$

2-(8-Carboxy-1-naphthylsulfinyl)benzoic acid

E.e. >98%

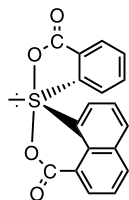
$[\alpha]_{578}^{25} = 510$ (*c* 0.5, DMF)

Source of chirality: resolution with (–)-quinine

Absolute configuration: *S*

Jenő Varga, József Rábai, Ferenc Ruff,* Árpád Kucsman,
Elemér Vass, Miklós Hollósi and Dénes Szabó*

Tetrahedron: Asymmetry 14 (2003) 3745



$C_{18}H_{10}O_4S$

3H-2,1-Benzoxathiole-1-spiro-1'-(3H-naphtho[1,8-d,e]-2,1-oxathiine)-3,3'-dione

E.e. >66%

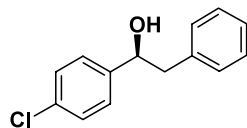
$[\alpha]_{255}^{25} = -416$ (*c* 0.5, DMF)

Source of chirality: stereospecific synthesis

Absolute configuration: *R*

Antonio J. Bustillo, Carlos M. García-Pajón, Josefina Aleu,
Rosario Hernández-Galán and Isidro G. Collado*

Tetrahedron: Asymmetry 14 (2003) 3755



$C_{14}H_{13}OCl$

(1*S*)-1-(4'-Chlorophenyl)-2-phenylethan-1-ol

Ee = 99%

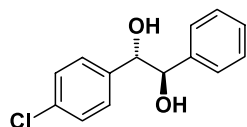
$[\alpha]_D^{20} = -23.0$ (c 2.9, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*S*)

Antonio J. Bustillo, Carlos M. García-Pajón, Josefina Aleu,
Rosario Hernández-Galán and Isidro G. Collado*

Tetrahedron: Asymmetry 14 (2003) 3755



$C_{14}H_{13}O_2Cl$

(1*S*,2*S*)-1-(4'-Chlorophenyl)-2-phenylethane-1,2-diol

Ee > 99%

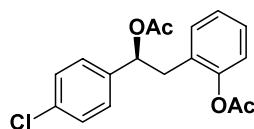
$[\alpha]_D^{20} = -114.2$ (c 1.9, $CHCl_3$)

Source of chirality: asymmetric synthesis

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

Antonio J. Bustillo, Carlos M. García-Pajón, Josefina Aleu,
Rosario Hernández-Galán and Isidro G. Collado*

Tetrahedron: Asymmetry 14 (2003) 3755



$C_{18}H_{17}O_4Cl$

(1*R*)-2-(2'-Acetoxyphenyl)-1-(4''-chlorophenyl)ethyl acetate

Ee = 92.7%

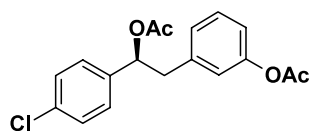
$[\alpha]_D^{20} = -3.6$ (c 0.8, $CHCl_3$)

Source of chirality: microbial transformation

Absolute configuration: (1*R*)

Antonio J. Bustillo, Carlos M. García-Pajón, Josefina Aleu,
Rosario Hernández-Galán and Isidro G. Collado*

Tetrahedron: Asymmetry 14 (2003) 3755



$C_{18}H_{17}O_4Cl$

(1*R*)-2-(3'-Acetoxyphenyl)-1-(4''-chlorophenyl)ethyl acetate

Ee = 94.8%

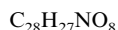
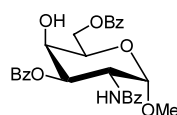
$[\alpha]_D^{20} = -4.0$ (c 0.5, $CHCl_3$)

Source of chirality: microbial transformation

Absolute configuration: (1*R*)

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Díanez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 2-benzamido-3,6-di-*O*-benzoyl-2-deoxy- α -D-galactopyranoside

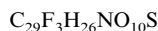
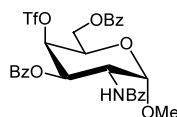
$$[\alpha]_D^{22} = +105 \text{ (c 1.0, CH}_2\text{Cl}_2\text{)}$$

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*S*,5*R*

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Díanez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 2-benzamido-3,6-di-*O*-benzoyl-2-deoxy-4-*O*-trifluoromethylsulfonyl- α -D-galactopyranoside

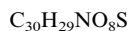
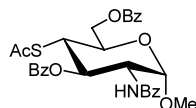
$$[\alpha]_D^{22} = +72 \text{ (c 1.0, CHCl}_3\text{)}$$

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*S*,5*R*

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Díanez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 4-*S*-acetyl-2-benzamido-3,6-di-*O*-benzoyl-2-deoxy-4-thio- α -D-glucopyranoside

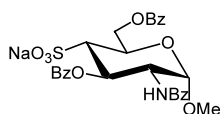
$$[\alpha]_D^{22} = +156 \text{ (c 1.0, CHCl}_3\text{)}$$

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*R*,5*R*

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Díanez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 2-benzamido-3,6-di-*O*-benzoyl-2,4-dideoxy- α -D-glucopyranoside-4-*C*-sulfonate sodium salt

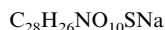
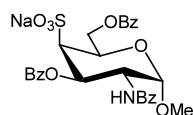
$$[\alpha]_D^{22} = +94 \text{ (c 1.0, MeOH)}$$

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*R*,5*R*

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Diáñez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 2-benzamido-3,6-di-*O*-benzoyl-2,4-dideoxy- α -D-galactopyranoside-4-*C*-sulfonate sodium salt

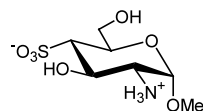
$[\alpha]_D^{22} = +103$ (*c* 1.0, MeOH)

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*S*,5*R*

José G. Fernández-Bolaños,* Salud García, José Fernández-Bolaños,
M^a Jesús Diáñez, M^a Dolores Estrada, Amparo López-Castro
and Simeón Pérez-Garrido

Tetrahedron: Asymmetry 14 (2003) 3761



Methyl 2-amino-2,4-dideoxy- α -D-glucopyranoside-4-*C*-sulfonic acid

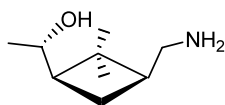
$[\alpha]_D^{22} = +99$ (*c* 1.0, H₂O)

Source of chirality: 2-amino-2-deoxy-D-glucose as starting material

Absolute configuration: 1*S*,2*R*,3*R*,4*S*,5*R*

Antonio R. Hergueta, Carmen López,* Franco Fernández,
Olga Caamaño and José M. Blanco

Tetrahedron: Asymmetry 14 (2003) 3773



(1*S*,1'*R*)-*cis*-1-[3'-(Aminomethyl)-2',2'-dimethylcyclobutyl]ethanol

Ee >98%

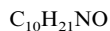
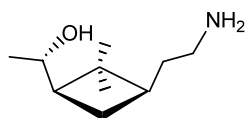
$[\alpha]_D^{25} = +22.6$ (*c* 0.78, MeOH)

Source of chirality: chiral pool and asymmetric synthesis

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

Antonio R. Hergueta, Carmen López,* Franco Fernández,
Olga Caamaño and José M. Blanco

Tetrahedron: Asymmetry 14 (2003) 3773



(1*S*,1'*R*)-*cis*-1-[3'-(2'-Aminoethyl)-2',2'-dimethylcyclobutyl]ethanol

Ee >98%

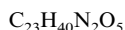
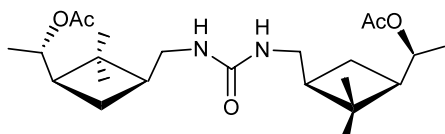
$[\alpha]_D^{25} = +24.6$ (*c* 0.78, MeOH)

Source of chirality: chiral pool and asymmetric synthesis

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

Antonio R. Hergueta, Carmen López,* Franco Fernández,
Olga Caamaño and José M. Blanco

Tetrahedron: Asymmetry 14 (2003) 3773



N,N'-Bis[(1*S*,1'*S*)-*cis*-3-(1'-acetoxyethyl)-2,2-dimethylcyclobutylmethyl]urea

Ee >98%

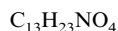
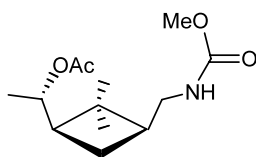
$[\alpha]_{\text{D}}^{25} = -6.8$ (*c* 0.25, MeOH)

Source of chirality: chiral pool and asymmetric synthesis

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

Antonio R. Hergueta, Carmen López,* Franco Fernández,
Olga Caamaño and José M. Blanco

Tetrahedron: Asymmetry 14 (2003) 3773



Methyl *N*-[(1*S*,1'*S*)-*cis*-3-(1'-acetoxyethyl)-2,2-dimethylcyclobutylmethyl]carbamate

Ee >98%

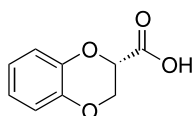
$[\alpha]_{\text{D}}^{25} = -0.8$ (*c* 1.0, EtOH)

Source of chirality: chiral pool and asymmetric synthesis

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

Cristiano Bolchi, Laura Fumagalli, Barbara Moroni, Marco Pallavicini
and Ermanno Valoti*

Tetrahedron: Asymmetry 14 (2003) 3779



(*S*)-1,4-Benzodioxan-2-carboxylic acid

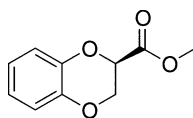
Ee >99.0%

$[\alpha]_{\text{D}}^{25} = -63.8$ (*c* 1, CHCl₃)

Source of chirality: resolution with dehydroabietylamine and recrystallisations as free acid

Cristiano Bolchi, Laura Fumagalli, Barbara Moroni, Marco Pallavicini
and Ermanno Valoti*

Tetrahedron: Asymmetry 14 (2003) 3779



(*R*)-Methyl 1,4-benzodioxan-2-carboxylate

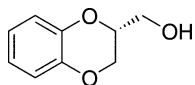
Ee = 99.4%

$[\alpha]_{\text{D}}^{25} = +57.0$ (*c* 1, CHCl₃)

Source of chirality: (*R*)-1,4-benzodioxan-2-carboxylic acid

Cristiano Bolchi, Laura Fumagalli, Barbara Moroni, Marco Pallavicini and Ermanno Valoti*

Tetrahedron: Asymmetry 14 (2003) 3779



$C_9H_{10}O_3$

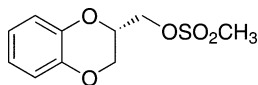
(*R*)-2-Hydroxymethyl-1,4-benzodioxane

$[\alpha]_D^{20} = +36.8$ (*c* 0.1, EtOH)

Source of chirality: (*S*)-methyl 1,4-benzodioxan-2-carboxylate

Cristiano Bolchi, Laura Fumagalli, Barbara Moroni, Marco Pallavicini and Ermanno Valoti*

Tetrahedron: Asymmetry 14 (2003) 3779



$C_{10}H_{12}O_5S$

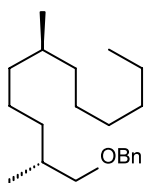
(*S*)-2-Mesyloxymethyl-1,4-benzodioxane

$[\alpha]_D^{25} = +17.3$ (*c* 1, $CHCl_3$)

Source of chirality: (*R*)-2-hydroxymethyl-1,4-benzodioxane

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{21}H_{36}O$

(-)-(2*R*,6*S*)-1-Benzyloxy-2,6-dimethyldodecane

Ee = 99%

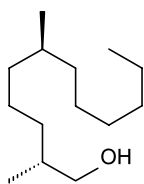
$[\alpha]_D^{25} = -0.6$ (*c* 1.32, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,6*S*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{14}H_{30}O$

(+)-(2*R*,6*S*)-2,6-Dimethyldodecan-1-ol

Ee = 99%

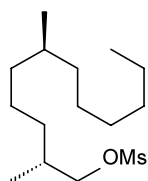
$[\alpha]_D^{25} = +9.6$ (*c* 7.35, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,6*S*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{15}H_{32}O_3S$

(+)-(2*R*,6*S*)-1-Methanesulfonate-2,6-dimethyl-dodecane

Ee = 99%

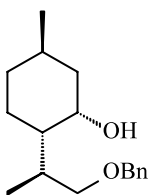
$[\alpha]_D^{25} = +1.8$ (c 1.96, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*R*,6*S*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{17}H_{26}O_2$

(+)-(1*R*,3*S*,4*S*,8*S*)-9-Benzyloxy-*p*-methan-3-ol

Ee = 99%

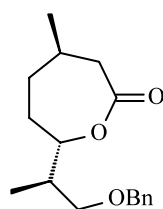
$[\alpha]_D^{25} = +3.6$ (c 5.60, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (1*R*,3*S*,4*S*,8*S*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{17}H_{24}O_3$

(+)-(3*R*,6*S*)-3-Methyl-6-[(1'*S*)-methyl-2-benzyl-oxymethyl]-ε-caprolactone

Ee = 99%

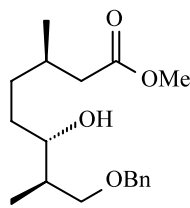
$[\alpha]_D^{25} = -7.3$ (c 1.05, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,6*S*); (1'*S*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{18}H_{28}O_4$

(-)-Methyl (3*R*,6*S*,7*R*)-8-benzyloxy-6-hydroxy-3,7-dimethyloctanoate

Ee = 99%

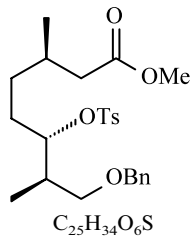
$[\alpha]_D^{25} = -14.1$ (c 3.97, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3*R*,6*S*,7*R*)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



(3R,6S,7R)-8-Benzyloxy-3,7-dimethyl-6-p-toluenesulfonyloxyoctanoate

Ee = 99%

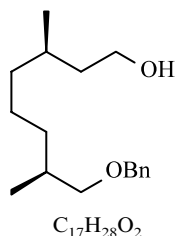
$[\alpha]_D^{25} = -0.75$ (c 2.55, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R,6S,7R)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



(+)-(3R,7S)-8-Benzyloxy-3,7-dimethyloctan-1-ol

Ee = 99%

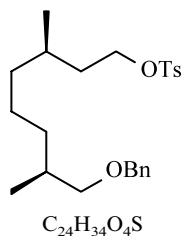
$[\alpha]_D^{25} = +2.5$ (c 0.70, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R,7S)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



(+)-(3R,7S)-8-Benzyloxy-3,7-dimethyloctyl-1-p-toluenesulfonate

Ee = 99%

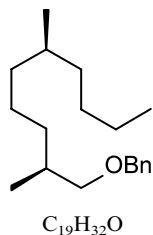
$[\alpha]_D^{25} = +1.9$ (c 1.45, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (3R,7S)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



(+)-(2S,6S)-1-Benzyloxy-2,6-dimethyldecane

Ee = 99%

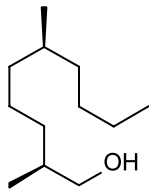
$[\alpha]_D^{25} = +2.4$ (c 0.82, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2S,6S)

Jardel A. Moreira and Arlene G. Corrêa*

Tetrahedron: Asymmetry 14 (2003) 3787



$C_{12}H_{26}O$

(-)-(2*S*,6*S*)-2,6-Dimethyldecane-1-ol

Ee = 99%

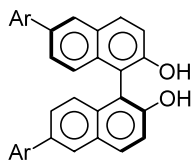
$[\alpha]_D^{25} = -7.95$ (*c* 1.85, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: (2*S*,6*S*)

G. Kumaraswamy,* M. N. V. Sastry, Nivedita Jena, K. Ravi Kumar and M. Vairamani

Tetrahedron: Asymmetry 14 (2003) 3797



$C_{32}H_{22}O_2$

(*S*)-6,6'-Diphenyl-1,1'-bi-2-naphthol

Ee = 100%

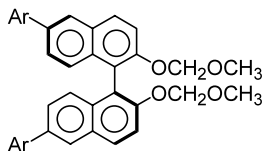
$[\alpha]_D^{20} = +215.0$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

G. Kumaraswamy,* M. N. V. Sastry, Nivedita Jena, K. Ravi Kumar and M. Vairamani

Tetrahedron: Asymmetry 14 (2003) 3797



$C_{36}H_{30}O_4$

(*S*)-2,2-Bis(methoxymethoxy)-6,6'-bis(2-phenyl)-1,1'-binaphthalene

Ee = 100%

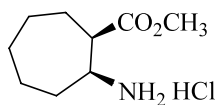
$[\alpha]_D^{20} = +100.0$ (*c* 1, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *S*

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola, Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



$C_9H_{18}ClNO_2$

Methyl (1*R*,2*S*)-2-aminocycloheptanecarboxylate hydrochloride

E.e. = 99%

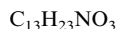
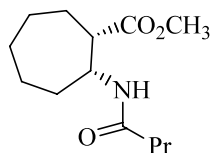
$[\alpha]_D^{22} = +12.2$ (*c* 1.00, H_2O)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



Methyl (1*S*,2*R*)-2-butanoylaminocycloheptanecarboxylate

E.e. = 98%

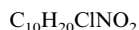
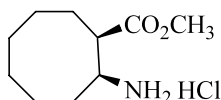
$[\alpha]_D^{22} = +57.7$ (*c* 1.00, CHCl₃)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



Methyl (1*R*,2*S*)-2-aminocyclooctanecarboxylate hydrochloride

E.e. = 99%

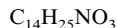
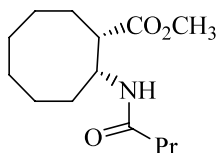
$[\alpha]_D^{22} = +33.4$ (*c* 1.00, H₂O)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



Methyl (1*S*,2*R*)-2-butanoylaminocyclooctanecarboxylate

E.e. = 95%

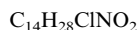
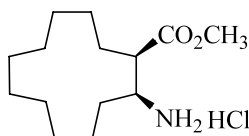
$[\alpha]_D^{22} = +41.7$ (*c* 1.00, CHCl₃)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



Methyl (1*R*,2*S*)-2-aminocyclododecanecarboxylate hydrochloride

E.e. = 97%

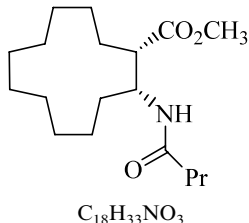
$[\alpha]_D^{22} = +33.4$ (*c* 1.00, MeOH)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



Methyl (1*S*,2*R*)-2-butanoylamino-12-oxo-12-phenylcyclohexanecarboxylate

E.e. = 99%

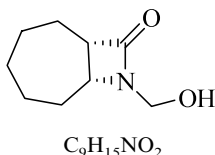
$[\alpha]_D^{22} = +28.6$ (*c* 1.00, CHCl₃)

Source of chirality: CAL-A-catalyzed enantioselective acylation

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

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*S*,7*R*)-8-Hydroxymethyl-8-azabicyclo[5.2.0]nonan-9-one

E.e. = 97%

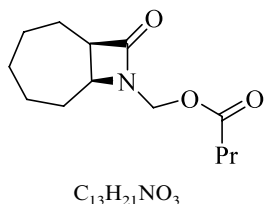
$[\alpha]_D^{22} = -26.2$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: (1*S*,7*R*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*R*,7*S*)-9-Oxo-8-azabicyclo[5.2.0]nonan-8-ylmethyl butanoate

E.e. = 97%

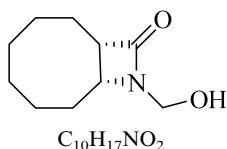
$[\alpha]_D^{22} = -52.3$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: (1*R*,7*S*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*S*,8*R*)-9-Hydroxymethyl-9-azabicyclo[6.2.0]nonan-10-one

E.e. = 91%

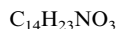
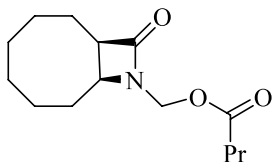
$[\alpha]_D^{22} = -38.8$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: (1*S*,8*R*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*R*,8*S*)-10-Oxo-9-azabicyclo[6.2.0]nonan-9-ylmethyl butanoate

E.e. = 82%

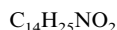
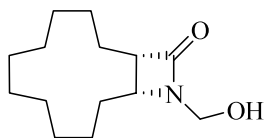
$[\alpha]_D^{22} = -39.9$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed
enantioselective acylation

Absolute configuration: (1*R*,8*S*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*S*,12*R*)-13-Hydroxymethyl-13-azabicyclo[10.2.0]nonan-14-one

E.e. = 93%

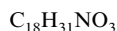
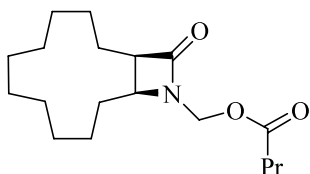
$[\alpha]_D^{22} = -30.2$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed
enantioselective acylation

Absolute configuration: (1*S*,12*R*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*R*,12*S*)-14-Oxo-13-azabicyclo[10.2.0]tetradec-13-ylmethyl butanoate

E.e. = 94%

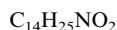
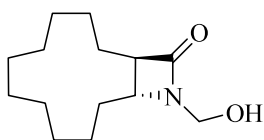
$[\alpha]_D^{22} = -24.5$ (*c* 1.00, CHCl₃)

Source of chirality: lipase PS-catalyzed
enantioselective acylation

Absolute configuration: (1*R*,12*S*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*R*,12*R*)-13-Hydroxymethyl-13-azabicyclo[10.2.0]nonan-14-one

E.e. = 91%

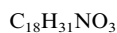
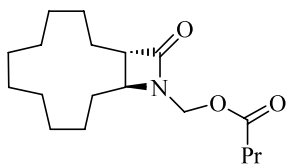
$[\alpha]_D^{22} = -146.6$ (*c* 1.00, CHCl₃)

Source of chirality: CAL-B-catalyzed enantioselective
acylation

Absolute configuration: (1*R*,12*R*)

Zsuzsanna Cs. Gyarmati, Arto Liljeblad, Mikko Rintola,
Gábor Bernáth and Liisa T. Kanerva*

Tetrahedron: Asymmetry 14 (2003) 3805



(1*S*,12*S*)-14-Oxo-13-azabicyclo[10.2.0]tetradec-13-ylmethyl butanoate

E.e. = 91%

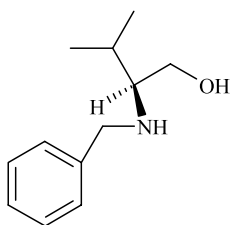
$[\alpha]_D^{22} = 54.4$ (c 1.00, $CHCl_3$)

Source of chirality: CAL-B-catalyzed enantioselective acylation

Absolute configuration: (1*S*,12*S*)

Y. Turgut and H. Hoşgören*

Tetrahedron: Asymmetry 14 (2003) 3815



(*S*)-*N*-Benzyl-2-amino-3-methyl-1-butanol

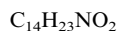
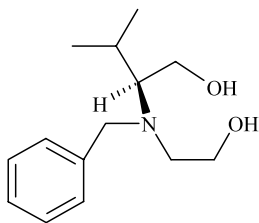
$[\alpha]_D^{20} = -10.5$ (c 1, MeOH)

Source of chirality: (*S*)-valinol

Absolute configuration: *S*

Y. Turgut and H. Hoşgören*

Tetrahedron: Asymmetry 14 (2003) 3815



(*S*)-*N*-Benzyl-4-hydroxymethyl-3-aza-5-methyl-hexane-1-ol

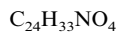
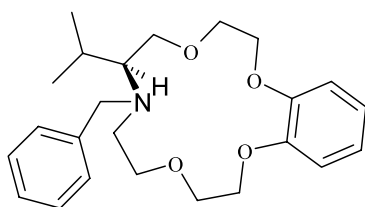
$[\alpha]_D^{20} = -14.9$ (c 1, MeOH)

Source of chirality: (*S*)-valinol

Absolute configuration: *S*

Y. Turgut and H. Hoşgören*

Tetrahedron: Asymmetry 14 (2003) 3815

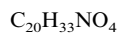
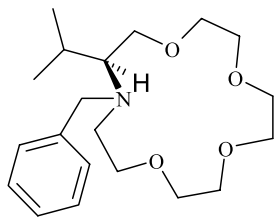


(*S*)-2-Isopropyl-*N*-benzyl-4,7,10,13-tetraoxa-8,9-benzo-1-azacyclopentadec-8-ene

$[\alpha]_D^{20} = -26.3$ (c 1, $CHCl_3$)

Source of chirality: (*S*)-valinol

Absolute configuration: *S*



(*S*)-2-Isopropyl-*N*-benzyl-4,7,10,13-tetraoxa-1-azacyclopentadec-8-ene

$[\alpha]_{\text{D}}^{20} = -16.4$ (*c* 1, CHCl_3)

Source of chirality: (*S*)-valinol

Absolute configuration: *S*