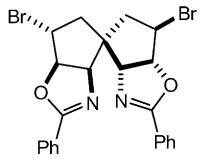
Takahiro Kato, Kazuyoshi Marubayashi, Shinobu Takizawa and Hiroaki Sasai*

Tetrahedron: Asymmetry *15 (2004) 3693*



$C_{23}H_{20}Br_2N_2O_2$

(*M*,*R*,*R*,*R*,*R*,*R*)-6,6′-Dibromo-2,2′-diphenyl-3a,3a′,6a,6a′-tetrahydro-4,4′-spirobicyclopentaoxazole

Ee = 100%

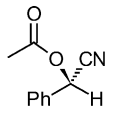
$[\alpha]_D^{26} = -112.7$ (*c* 0.69, $CHCl_3$)

Souce of chirality: separation (Daicel Chiralpak AD)

Absolute configuration: (*M*,*R*,*R*,*R*,*R*,*R*)

Lars Veum and Ulf Hanefeld*

Tetrahedron: Asymmetry *15 (2004) 3707*



$C_{10}H_9O_2N$

(*S*)-Mandelonitrile acetate

Ee = 98%

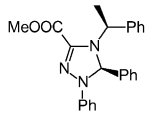
$[\alpha]_D^{20} = -6.2$ (*c* 1, $CHCl_3$)

Source of chirality: lipase-catalysed dynamic kinetic resolution

Absolute configuration: (*S*)

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{24}H_{23}N_3O_2$

1-Phenyl-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-phenyl-4,5-dihydrotriazole

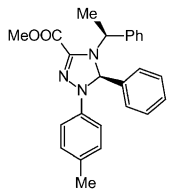
$[\alpha]_D^{25} = +28.5$ (*c* 0.36, $CHCl_3$)

Source of chirality: stereoselective nitrilimine cycloaddition

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

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{25}H_{25}N_3O_2$

1-(4-Methylphenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-phenyl-4,5-dihydrotriazole

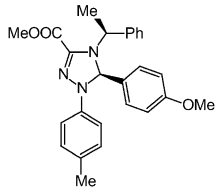
$[\alpha]_D^{25} = +12.8$ (*c* 0.40, $CHCl_3$)

Source of chirality: stereoselective nitrilimine cycloaddition

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

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{26}H_{27}N_3O_3$

$[\alpha]_D^{25} = +11.2$ (c 0.15, $CHCl_3$)

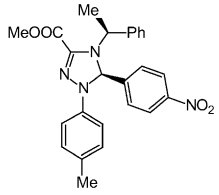
Source of chirality: stereoselective nitrilimine cycloaddition

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

1-(4-Methylphenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-(4-methoxyphenyl)-4,5-dihydrotriazole

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{25}H_{24}N_4O_4$

$[\alpha]_D^{25} = +34.1$ (c 0.58, $CHCl_3$)

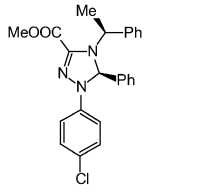
Source of chirality: stereoselective nitrilimine cycloaddition

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

1-(4-Methylphenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-(4-nitrophenyl)-4,5-dihydrotriazole

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{24}H_{22}ClN_3O_2$

$[\alpha]_D^{25} = +8.8$ (c 0.11, $CHCl_3$)

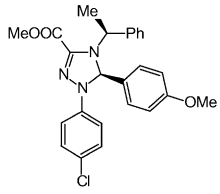
Source of chirality: stereoselective nitrilimine cycloaddition

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

1-(4-Chlorophenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-phenyl-4,5-dihydrotriazole

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$C_{25}H_{24}ClN_3O_3$

$[\alpha]_D^{25} = +49.3$ (c 0.66, $CHCl_3$)

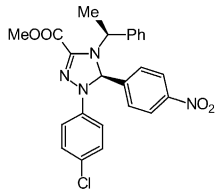
Source of chirality: stereoselective nitrilimine cycloaddition

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

1-(4-Chlorophenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-(4-methoxyphenyl)-4,5-dihydrotriazole

Giorgio Molteni* and Alessandro Ponti

Tetrahedron: Asymmetry *15 (2004) 3711*



$[\alpha]_D^{25} = +13.9$ (*c* 0.14, $CHCl_3$)
Source of chirality: stereoselective nitrilimine cycloaddition
Absolute configuration: 4-(2*S*),5-(*R*)

$C_{24}H_{21}ClN_4O_4$
1-(4-Chlorophenyl)-3-methoxycarbonyl-4-(2-(*S*)-phenylethyl)-5-(*R*)-(4-nitrophenyl)-4,5-dihydrotriazole

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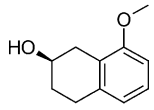
Muneto Mogi, Kaoru Fuji and Manabu Node*

Tetrahedron: Asymmetry *15 (2004) 3715*

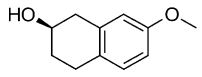


$[\alpha]_D^{27} = +48.6$ (*c* 0.27, EtOH), 98% ee
Absolute configuration: 2*R*
Source of chirality: asymmetric reduction

$C_{11}H_{14}O_2$
(2*R*)-8-Methoxy-2-tetralol

Muneto Mogi, Kaoru Fuji and Manabu Node*

Tetrahedron: Asymmetry *15 (2004) 3715*

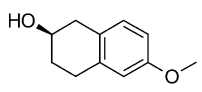


$[\alpha]_D^{27} = +45.0$ (*c* 0.22, EtOH), 88% ee
Absolute configuration: 2*R*
Source of chirality: asymmetric reduction

$C_{11}H_{14}O_2$
(2*R*)-7-Methoxy-2-tetralol

Muneto Mogi, Kaoru Fuji and Manabu Node*

Tetrahedron: Asymmetry *15 (2004) 3715*

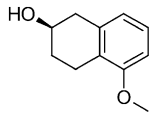


$[\alpha]_D^{27} = +60.8$ (*c* 0.42, EtOH), 92% ee
Absolute configuration: 2*R*
Source of chirality: asymmetric reduction

$C_{11}H_{14}O_2$
(2*R*)-6-Methoxy-2-tetralol

Muneto Mogi, Kaoru Fuji and Manabu Node*

Tetrahedron: Asymmetry *15 (2004) 3715*



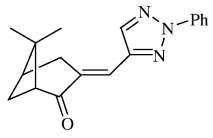
$C_{11}H_{14}O_2$

(2*R*)-5-Methoxy-2-tetralol

$[\alpha]_D^{27} = +57.1$ (*c* 0.45, EtOH), 88% ee
Absolute configuration: 2*R*
Source of chirality: asymmetric reduction

Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



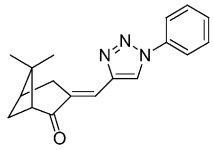
$C_{18}H_{19}N_3O$

(1*R*,5*R*)-(−)-6,6-Dimethyl-3-(2-phenyl-2*H*-[1,2,3]triazol-4-ylmethylene)-bicyclo[3.1.1]heptan-2-one

$[\alpha]_D^{25} = -1.8$ (*c* 2.65, CH_2Cl_2)
Source of chirality: synthesis
Absolute configuration: 1*R*,5*R*

Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



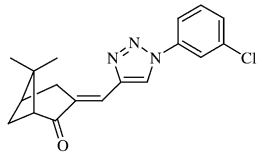
$C_{18}H_{19}N_3O$

(1*R*,5*R*)-(+)-6,6-Dimethyl-3-(1-phenyl-1*H*-[1,2,3]triazol-4-ylmethylene)-bicyclo[3.1.1]heptan-2-one

$[\alpha]_D^{25} = +5.5$ (*c* 2.3, CH_2Cl_2)
Source of chirality: synthesis
Absolute configuration: 1*R*,5*R*

Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



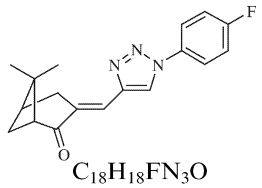
$C_{18}H_{18}ClN_3O$

(1*R*,5*R*)-(+)-3-[1-(3-Chloro-phenyl)-1*H*-[1,2,3]triazol-4-ylmethylene]-6,6-dimethyl-bicyclo[3.1.1]heptan-2-one

$[\alpha]_D^{25} = +2.5$ (*c* 2.29, CH_2Cl_2)
Source of chirality: synthesis
Absolute configuration: 1*R*,5*R*

Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



$[\alpha]_D^{25} = +11.2$ (*c* 2.09, CH_2Cl_2)
Source of chirality: synthesis
Absolute configuration: 1*R*,5*R*

$C_{18}H_{18}FN_3O$

(1*R*,5*R*)-(+)-3-[1-(4-Fluoro-phenyl)-1*H*-[1,2,3]triazol-4-ylmethylene]-6,6-dimethyl-bicyclo[3.1.1]heptan-2-one

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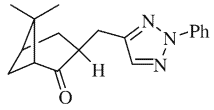
Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



De = 94%
$[\alpha]_D^{25} = -46$ (*c* 0.76, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,3*S*,5*R*

$C_{18}H_{21}N_3O$

(1*R*,3*S*,5*R*)-(−)-6,6-Dimethyl-3-(2-phenyl-2*H*-[1,2,3]triazol-4-ylmethyl)-bicyclo[3.1.1]heptan-2-one

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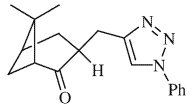
Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



De = 94%
$[\alpha]_D^{25} = -10.8$ (*c* 1.11, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,3*S*,5*R*

$C_{18}H_{21}N_3O$

(1*R*,3*S*,5*R*)-(−)-6,6-Dimethyl-3-(1-phenyl-1*H*-[1,2,3]triazol-4-ylmethyl)-bicyclo[3.1.1]heptan-2-one

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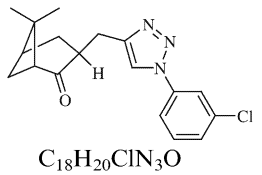
Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



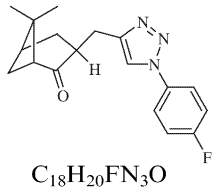
De = 94%
$[\alpha]_D^{25} = -11.1$ (*c* 0.99, CH_2Cl_2)
Source of chirality: asymmetric synthesis
Absolute configuration: 1*R*,3*S*,5*R*

$C_{18}H_{20}ClN_3O$

(1*R*,3*S*,5*R*)-(−)-3-[1-(3-Chloro-phenyl)-1*H*-[1,2,3]triazol-4-ylmethyl]-6,6-dimethyl-bicyclo[3.1.1]heptan-2-one

Ronaldo C. da Silva Junior, Vítor F. Ferreira and Sergio Pinheiro*

Tetrahedron: Asymmetry *15 (2004) 3719*



De = 94%

$[\alpha]_D^{25} = -9.7$ (*c* 1.03, CH_2Cl_2)

Source of chirality: asymmetric synthesis

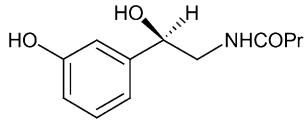
Absolute configuration: 1*R*,3*S*,5*R*

$C_{18}H_{20}FN_3O$

(1*R*,3*S*,5*R*)-(−)-3-[1-(4-Fluoro-phenyl)-1*H*-[1,2,3]triazol-4-ylmethyl]-6,6-dimethyl-bicyclo[3.1.1]heptan-2-one

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



Ee >98%

$[\alpha]_D^{20} = +5.0$ (*c* 2.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

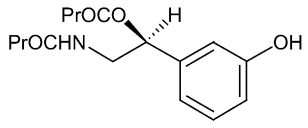
Absolute configuration: *R*

$C_{12}H_{17}NO_3$

(*R*)-*N*-[2-Hydroxy-2-(3-hydroxy)phenylethyl]butanamide

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



Ee = 98%

$[\alpha]_D^{20} = +46.8$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

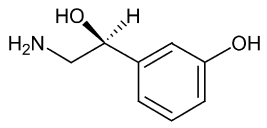
Absolute configuration: *S*

$C_{16}H_{23}NO_4$

(*S*)-*N*-[2-Butanoylamino-1-(3-hydroxy)phenylethyl]butanoate

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



Ee >98%

$[\alpha]_D^{20} = +1.7$ (*c* 5.6, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

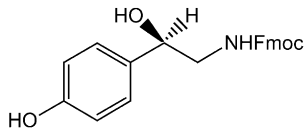
Absolute configuration: *S*

$C_8H_{11}NO_2$

(*S*)-2-Amino-1-[(3-hydroxy)phenyl]ethanol

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



$C_{23}H_{21}NO_4$

(*R*)-2-[*N*-(9-Fluorenylmethoxycarbonyl)amino]-1-[(4-hydroxy)phenyl]ethanol

Ee = 96%

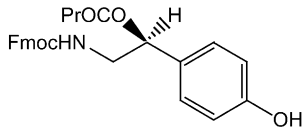
$[\alpha]_D^{20} = +4.5$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: *R*

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



$C_{27}H_{27}NO_5$

(*S*)-2-[*N*-(9-Fluorenylmethoxycarbonyl)amino]-1-[(4-hydroxy)phenylethyl]butanoate

Ee = 98%

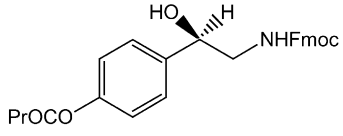
$[\alpha]_D^{20} = +47.5$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: *S*

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



$C_{27}H_{27}NO_5$

(*R*)-1-[(4-Butanoyloxy)phenyl]-2-[*N*-(9-fluorenylmethoxycarbonyl)amino]ethanol

Ee >98%

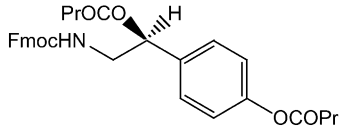
$[\alpha]_D^{20} = +9.7$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: *R*

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



$C_{31}H_{33}NO_6$

(*S*)-1-[(4-Butanoyloxy)phenyl]-2-[*N*-(9-fluorenylmethoxycarbonyl)amino]butanoate

Ee >98%

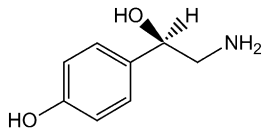
$[\alpha]_D^{20} = +31.0$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: *S*

Katri Lundell, Erja Katainen, Anu Kiviniemi and Liisa T. Kanerva*

Tetrahedron: Asymmetry *15 (2004) 3723*



$C_8H_{11}NO_2$

(*R*)-2-Amino-1-[(4-hydroxy)phenyl]ethanol

Ee >98%

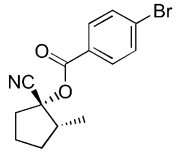
$[\alpha]_D^{20} = -31.6$ (*c* 1.0, MeOH)

Source of chirality: lipase PS-catalyzed enantioselective acylation

Absolute configuration: *R*

Christoph Kobler and Franz Effenberger*

Tetrahedron: Asymmetry *15 (2004) 3731*



$C_{14}H_{14}NO_2Br$

cis-(1*S*,2*R*)-1-(4-Bromobenzoyloxy)-2-methylcyclopentanecarbonitrile

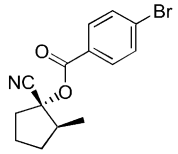
$[\alpha]_D^{20} = +0.5$ (*c* 1.0, $CHCl_3$)

Source of chirality: hydroxynitrile lyase-catalyzed HCN addition

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

Christoph Kobler and Franz Effenberger*

Tetrahedron: Asymmetry *15 (2004) 3731*



$C_{14}H_{14}NO_2Br$

trans-(1*S*,2*S*)-1-(4-Bromobenzoyloxy)-2-methylcyclopentanecarbonitrile

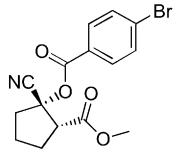
$[\alpha]_D^{20} = +2.6$ (*c* 1.0, $CHCl_3$)

Source of chirality: hydroxynitrile lyase-catalyzed HCN addition

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

Christoph Kobler and Franz Effenberger*

Tetrahedron: Asymmetry *15 (2004) 3731*



$C_{15}H_{14}NO_4Br$

cis-(1*R*,2*S*)-1-(4-Bromobenzoyloxy)-2-cyanocyclopentanecarboxylic acid methyl ester

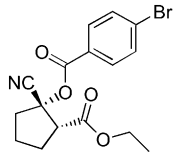
$[\alpha]_D^{20} = -9.1$ (*c* 1.0, $CHCl_3$)

Source of chirality: hydroxynitrile lyase-catalyzed HCN addition

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

Christoph Kobler and Franz Effenberger*

Tetrahedron: Asymmetry *15 (2004) 3731*



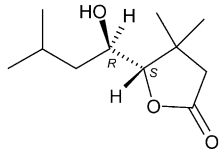
$C_{16}H_{16}NO_4Br$

cis-(1*R*,2*S*)-1-(4-Bromobenzoyloxy)-2-cyanocyclopentanecarboxylic acid ethyl ester

$[\alpha]_D^{20} = -1.9$ (*c* 1.0, $CHCl_3$)
Source of chirality: hydroxynitrile lyase-catalyzed HCN addition
Absolute configuration: 1*R*,2*S*

Teresa Olejniczak* and Zbigniew Ciunik

Tetrahedron: Asymmetry *15 (2004) 3743*



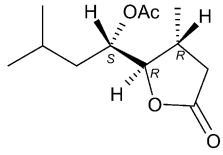
$C_{13}H_{22}O_4$

(5*S*)-((1′*R*)-Acetoxy-3′-methylbutyl)-4,4-dimethyl-tetrahydrofuran-2-one

Ee >99% by Chiral GC
$[\alpha]_D^{21.1} = +30.6$ (*c* 2.7, $CHCl_3$)
Source of chirality: microbial resolution
Absolute configuration 1′*R*,5*S*

Teresa Olejniczak* and Zbigniew Ciunik

Tetrahedron: Asymmetry *15 (2004) 3743*



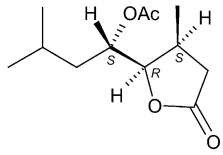
$C_{12}H_{20}O_4$

(5*S*)-((1′*S*)-Acetoxy-3′-methylbutyl)-(4*R*)-methyl-tetrahydrofuran-2-one

Ee >95% by Chiral GC
$[\alpha]_D^{21.1} = -26.1$ (*c* 2.4, $CHCl_3$)
Source of chirality: microbial resolution
Absolute configuration 1′*S*,4*R*,5*R*

Teresa Olejniczak* and Zbigniew Ciunik

Tetrahedron: Asymmetry *15 (2004) 3743*



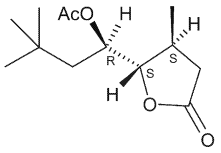
$C_{12}H_{20}O_4$

(5*R*)-((1′*S*)-Acetoxy-3′-methylbutyl)-(4*S*)-methyl-tetrahydrofuran-2-one

Ee >99% by Chiral GC
$[\alpha]_D^{21.1} = -34.9$ (*c* 2.0, $CHCl_3$)
Source of chirality: microbial resolution
Absolute configuration 1′*S*,4*S*,5*R*

Teresa Olejniczak* and Zbigniew Ciunik

Tetrahedron: Asymmetry *15 (2004) 3743*



$C_{13}H_{22}O_4$

(5*S*)-((1′*R*)-Acetoxy-3′3′-dimethylbutyl)-(4*S*)-methyl-tetrahydrofuran-2-one

Ee >97% by Chiral GC

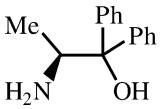
$[\alpha]_D^{21.1} = +31.5$ (*c* 3.1, $CHCl_3$)

Source of chirality: microbial resolution

Absolute configuration 1′*R*,4*S*,5*S*

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*



$C_{15}H_{17}NO$

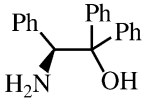
(*S*)-2-Amino-1,1-diphenylpropan-1-ol

$[\alpha]_D^{25} = -83.0$ (*c* 0.814, $CHCl_3$)

Source of chirality: (*S*)-alanine

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*



$C_{20}H_{19}NO$

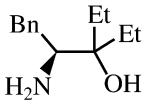
(*S*)-2-Amino-1,1,3-triphenylethan-1-ol

$[\alpha]_D^{18} = -212.0$ (*c* 1.50, $CHCl_3$)

Source of chirality: (*S*)-phenylglycin

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*



$C_{13}H_{21}NO$

(*S*)-2-Amino-3-ethyl-1-phenylpentan-3-ol

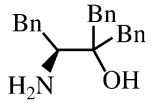
$[\alpha]_D^{19} = -39.0$ (*c* 0.94, $CHCl_3$)

Source of chirality: (*S*)-phenylalanine

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{18} = +19$ (*c* 1.38, $CHCl_3$)
Source of chirality: (*S*)-phenylalanine

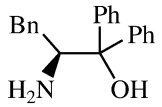


$C_{23}H_{25}NO$
(*S*)-3-Amino-2-benzyl-1,4-diphenylbutan-2-ol

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{18} = -85.0$ (*c* 1.10, $CHCl_3$)
Source of chirality: (*S*)-phenylalanine

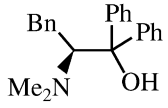


$C_{21}H_{21}NO$
(*S*)-2-Amino-1,1,3-triphenylpropan-1-ol

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{20} = +32.0$ (*c* 0.85, $CH_3COOC_2H_5$)
Source of chirality: (*S*)-phenylalanine

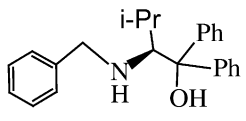


$C_{23}H_{25}NO$
(*S*)-1,1,3-Triphenyl-2-(*N*,*N*-dimethylamino)propan-1-ol

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{25} = -34.0$ (*c* 1.24, CH_2Cl_2)
Source of chirality: (*S*)-valine

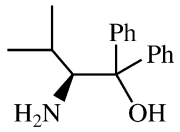


$C_{24}H_{27}NO$
(*S*)-3-Methyl-2-benzylamino-1,1-diphenylbutan-1-ol

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{18} = -124.0$ (*c* 1.27, $CHCl_3$)
Source of chirality: (*S*)-valine

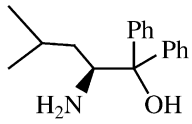


$C_{17}H_{21}NO$
(*S*)-2-Amino-3-methyl-1,1-diphenylbutan-1-ol

Lei Liu, Yong-feng Kang, Rui Wang,* Yi-feng Zhou, Chao Chen, Ming Ni and Mao-zhen Gong

Tetrahedron: Asymmetry *15 (2004) 3757*

$[\alpha]_D^{18} = -105.0$ (*c* 1.36, $CHCl_3$)
Source of chirality: (*S*)-leucine

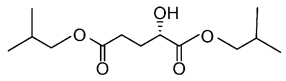


$C_{18}H_{23}NO$
(*S*)-2-Amino-4-methyl-1,1-diphenylpentan-1-ol

Eduardo M. Rustoy, Elba N. Pereyra, Silvia Moreno and Alicia Baldessari*

Tetrahedron: Asymmetry *15 (2004) 3763*

Ee = 95%
$[\alpha]_D^{25} = -5.2$ (*c* = 0.68, CH_3OH)
Source of chirality: microbial reduction
Absolute configuration: (2*S*)

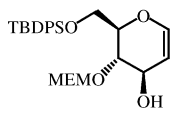


$C_{13}H_{24}O_5$
Di-*i*-butyl-(2*S*)-2-hydroxyglutarate

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*

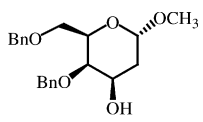
Ee = 100%
$[\alpha]_D^{25} = -17.0$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucal as starting material



$C_{26}H_{36}O_6Si$
1,5-Anhydro-6-*O*-*tert*-butyldiphenylsilyl-2-deoxy-4-*O*-(2-methoxyethoxymethyl)-D-*arabino*-hex-1-enitol

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{21}H_{26}O_5$

Methyl 4,6-di-*O*-benzyl-2-deoxy-α-D-*lyxo*-hexopyranoside

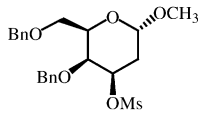
Ee = 100%

$[\alpha]_D^{25} = +73.0$ (*c* 1.3, $CHCl_3$)

Source of chirality: D-galactal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{22}H_{28}O_7S$

Methyl 4,6-di-*O*-benzyl-2-deoxy-3-*O*-mesyl-α-D-*lyxo*-hexopyranoside

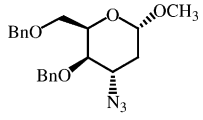
Ee = 100%

$[\alpha]_D^{25} = +66.0$ (*c* 1.2, $CHCl_3$)

Source of chirality: D-galactal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{21}H_{25}N_3O_4$

Methyl 3-azido-4,6-di-*O*-benzyl-2,3-dideoxy-α-D-*xylo*-hexopyranoside

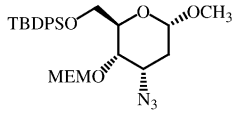
Ee = 100%

$[\alpha]_D^{25} = +94.0$ (*c* 1.5, $CHCl_3$)

Source of chirality: D-galactal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{27}H_{39}N_3O_6Si$

Methyl 3-azido-6-*O*-*tert*-butyldiphenylsilyl-2,3-dideoxy-4-*O*-(2-methoxyethoxymethyl)-D-*ribo*-hexopyranoside

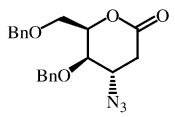
Ee = 100%

$[\alpha]_D^{25} = -35.0$ (*c* 1.3, $CHCl_3$)

Source of chirality: D-glucal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{20}H_{21}N_3O_4$

3-Azido-4,6-di-*O*-benzyl-2,3-dideoxy-D-idonolactone

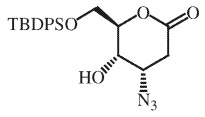
Ee = 100%

$[\alpha]_D^{25} = +65.0$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-galactal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{22}H_{27}N_3O_4Si$

3-Azido-6-*O*-*tert*-butyldiphenylsilyl-2,3-dideoxy-D-altronolactone

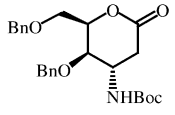
Ee = 100%

$[\alpha]_D^{25} = -42.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-glucal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{25}H_{31}NO_6$

4,6-di-*O*-Benzyl-3-(*tert*-butoxycarbonyl)amino-2,3-dideoxy-D-idonolactone

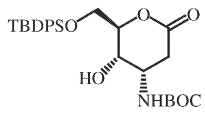
Ee = 100%

$[\alpha]_D^{25} = +42.0$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-galactal as starting material

Antonella Squarcia, Simona Marroni, Giovanni Piancatelli* and Pietro Passacantilli

Tetrahedron: Asymmetry *15 (2004) 3769*



$C_{27}H_{37}NO_6Si$

6-*O*-*tert*-Butyldiphenylsilyl-3-(*tert*-butoxycarbonyl)amino-2,3-dideoxy-D-altronolactone

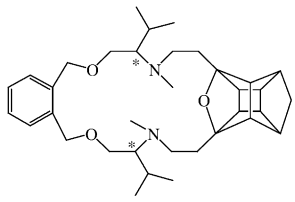
Ee = 100%

$[\alpha]_D^{25} = -75.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-glucal as starting material

Grant A. Boyle, Thavendran Govender, Hendrik G. Kruger* and Glenn E. M. Maguire

Tetrahedron: Asymmetry *15 (2004) 3775*



$C_{35}H_{52}N_2O_3$

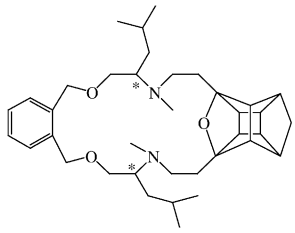
$[\alpha]_D^{22} = +2.1$ (*c* 2, $CHCl_3$)

Source of chirality: (*S*)-(+)-3-methyl-2-methyl-amino-butan-1-ol

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

Grant A. Boyle, Thavendran Govender, Hendrik G. Kruger* and Glenn E. M. Maguire

Tetrahedron: Asymmetry *15 (2004) 3775*



$C_{37}H_{56}N_2O_3$

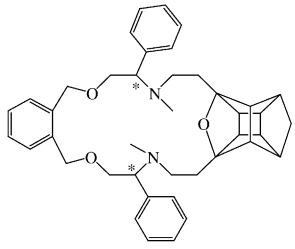
$[\alpha]_D^{22} = +17.0$ (*c* 5, $CHCl_3$)

Source of chirality: (*S*)-(+)-4-methyl-2-methyl-amino-pentan-1-ol

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

Grant A. Boyle, Thavendran Govender, Hendrik G. Kruger* and Glenn E. M. Maguire

Tetrahedron: Asymmetry *15 (2004) 3775*



$C_{41}H_{48}N_2O_3$

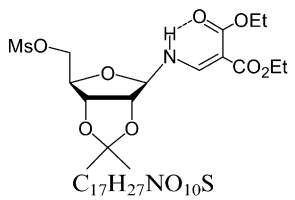
$[\alpha]_D^{22} = +11.3$ (*c* 5, $CHCl_3$)

Source of chirality: (*S*)-(+)-2-methylamino-2-phenyl-ethanol

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

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



$C_{17}H_{27}NO_{10}S$

$[\alpha]_D^{24} = -88$ (*c* 1.2, CH_2Cl_2)

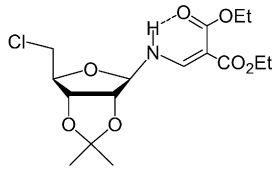
Source of chirality: β-D-ribofuranosylamine

N-(2,2-Diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-5-*O*-mesyl-β-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*

$[\alpha]_D^{23} = -7.5$ (*c* 1.0, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine



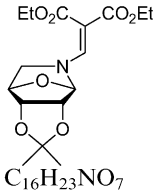
$C_{16}H_{24}ClNO_7$

5-Chloro-5-deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-β-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*

$[\alpha]_D^{23} = 0$ (*c* 1.0, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine



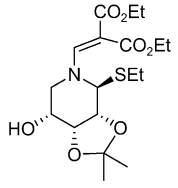
$C_{16}H_{23}NO_7$

1,5-Anhydro-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-β-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*

$[\alpha]_D^{28} = -46$ (*c* 0.9, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine



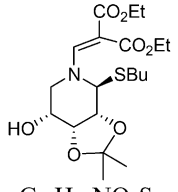
$C_{18}H_{29}NO_7S$

N-(2,2-Diethoxycarbonylvinyl)-2-ethylthio-5-hydroxy-3,4-*O*-isopropylidenepiperidine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*

$[\alpha]_D^{24} = -56$ (*c* 0.9, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine

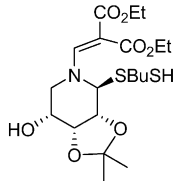


$C_{20}H_{35}NO_7S$

2-Butylthio-*N*-(2,2-diethoxycarbonylvinyl)-5-hydroxy-3,4-*O*-isopropylidenepiperidine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



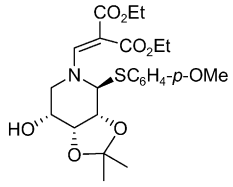
$C_{20}H_{30}NO_7S_2$

$[\alpha]_D^{24} = -48$ (*c* 0.7, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine

N-(2,2-Diethoxycarbonylvinyl)-5-hydroxy-3,4-*O*-isopropylidene-2-mercaptobutylthiopiperidine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



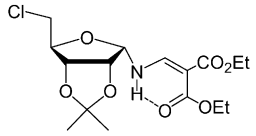
$C_{23}H_{31}NO_8S$

$[\alpha]_D^{24} = -141$ (*c* 1.1, CH_2Cl_2)
Source of chirality: β-D-ribofuranosylamine

N-(2,2-Diethoxycarbonylvinyl)-5-hydroxy-3,4-*O*-isopropylidene-2-(4-methoxyphenyl)thiopiperidine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



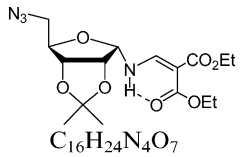
$C_{16}H_{24}ClNO_7$

$[\alpha]_D^{24} = -53$ (*c* 1.0, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine

5-Chloro-5-deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-α-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



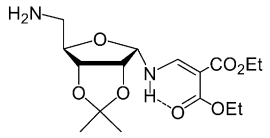
$C_{16}H_{24}N_4O_7$

$[\alpha]_D^{23} = -74$ (*c* 1.0, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine

5-Azido-5-deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-α-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



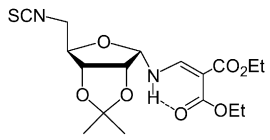
$[\alpha]_D^{24} = -77$ (*c* 1.0, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine

$C_{16}H_{26}N_2O_7$

5-Amino-5-deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-α-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



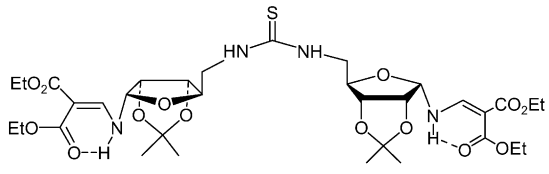
$[\alpha]_D^{23} = -14$ (*c* 0.9, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine

$C_{17}H_{24}N_2O_7S$

5-Deoxy-*N*-(2,2-diethoxycarbonylvinyl)-2,3-*O*-isopropylidene-5-isothiocianato-α-D-ribofuranosylamine

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



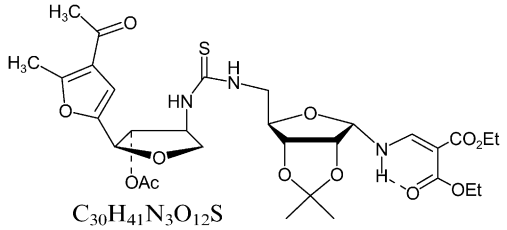
$[\alpha]_D^{24} = -69$ (*c* 1.0, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine

$C_{33}H_{50}N_4O_{14}S$

1-(2,2-Diethoxycarbonylvinylamino)-1-deoxy-*N*,*N*′-bis-(2,3-*O*-isopropylidene-α-D-ribofuranos-5-yl)thiourea

José Fuentes,* José M. Illangua, Francisco J. Sayago, Manuel Angulo, Consolación Gasch and M. Ángeles Pradera

Tetrahedron: Asymmetry *15 (2004) 3783*



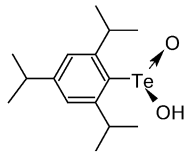
$[\alpha]_D^{24} = -44$ (*c* 1.1, CH_2Cl_2)
Source of chirality: α-D-ribofuranosylamine and 5-(3′-amino-3′-deoxy-α-L-threofuranosyl)-3-ethoxycarbonyl-2-methylfurane

$C_{30}H_{41}N_3O_{12}S$

N-[2-*O*-Acetyl-1,3-dideoxy-1-(3″-acetyl-2″-methylfur-5″-yl)-α-L-threofuranos-3-yl]-*N*′-[1-(2,2-diethoxycarbonylvinylamino-2,3-*O*-isopropylidene)-1-deoxy-α-D-ribofuranos-5-yl]thiourea

Yusuke Nakashima, Toshio Shimizu,* Kazunori Hirabayashi, Masanori Yasui, Masaki Nakazato, Fujiko Iwasaki and Nobumasa Kamigata*

Tetrahedron: Asymmetry *15 (2004) 3791*



$C_{15}H_{24}O_2Te$

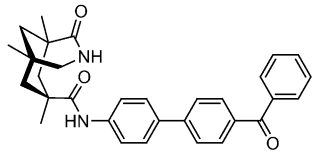
(*S*)-2,4,6-Triisopropylbenzenetellurinic acid

$[\alpha]_{435}^{28} = +2.5 \times 10^3$ (c 1.2×10^{-3}, hexane)

Absolute configuration: *S*

Andreas Bauer and Thorsten Bach*

Tetrahedron: Asymmetry *15 (2004) 3799*



$C_{31}H_{32}N_2O_3$

(1*R*,5*S*,7*S*)-1,5,7-Trimethyl-2-oxo-3-azabicyclo[3.3.1]nonane-7-carboxylic acid (4″-benzoylbiphenyl-4′-yl)-amide

Ee = 100%

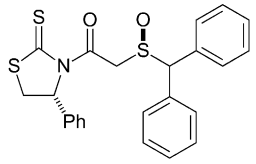
$[\alpha]_D^{20} = -59.3 \pm 0.4$ (c 0.1, $CHCl_3$)

Source of chirality: resolution

Absolute configuration: (1*R*,5*S*,7*S*)

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{24}H_{21}NO_2S_3$

(−)-[(4*R*)-Phenyl-2-thioxo-thazolidine-3-yl]-(*R*)-(diphenylmethanesulfinyl)acetamide

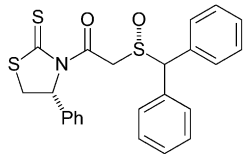
$[\alpha]_D^{22} = -230.4$ (c 0.99, $CHCl_3$)

Source of chirality: chromatographic separation of diastereomers

Absolute configuration: 4*R*,*R*

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{24}H_{21}NO_2S_3$

(−)-[(4*R*)-Phenyl-2-thioxo-thazolidine-3-yl]-(*S*)-(diphenylmethanesulfinyl)acetamide

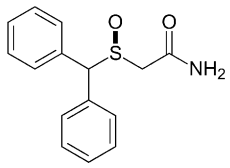
$[\alpha]_D^{22} = -216.5$ (c 1.0, $CHCl_3$)

Source of chirality: chromatographic separation of diastereomers

Absolute configuration: 4*R*,*S*

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{15}H_{15}NO_2S$

(+)-(*S*)-(Diphenylmethanesulfinyl)acetamide

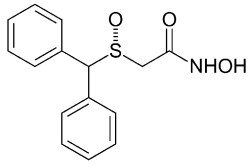
$[\alpha]_D^{22} = +81$ (*c* 1.0, $CHCl_3$)

Source of chirality: synthesis from (−)-[(4*R*)-phenyl-2-thioxo-thazolidine-3-yl]-(*S*)-(diphenylmethanesulfinyl)acetamide

Absolute configuration: *S*

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{15}H_{15}NO_3S$

(+)-(*R*)-(Diphenylmethanesulfinyl)acetohydroxamic acid

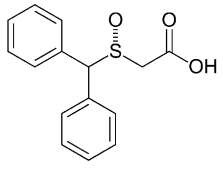
$[\alpha]_D^{22} = +14$ (*c* 0.85, CH_3OH)

Source of chirality: synthesis from (−)-[(4*R*)-phenyl-2-thioxo-thazolidine-3-yl]-(*R*)-(diphenylmethanesulfinyl)acetamide

Absolute configuration: *R*

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{15}H_{14}O_3S$

(−)-(*R*)-(Diphenylmethanesulfinyl)acetic acid

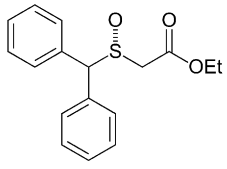
$[\alpha]_D^{22} = -41.7$ (*c* 1.0, CH_3OH)

Source of chirality: synthesis from (−)-[(4*R*)-phenyl-2-thioxo-thazolidine-3-yl]-(*R*)-(diphenylmethanesulfinyl)acetamide

Absolute configuration: *R*

Antonio Osorio-Lozada, Thomas Prisinzano and Horacio F. Olivo*

Tetrahedron: Asymmetry *15 (2004) 3811*



$C_{17}H_{18}O_3S$

(−)-(*R*)-Ethyl (diphenylmethanesulfinyl)acetate

$[\alpha]_D^{22} = -58.5$ (*c* 0.85, $CHCl_3$)

Source of chirality: synthesis from (−)-[(4*R*)-phenyl-2-thioxo- thazolidine-3-yl]-(*R*)-(diphenylmethanesulfinyl)acetamide

Absolute configuration: *R*