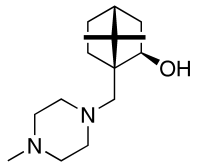
Tomás de las Casas Engel, Beatriz Lora Maroto,
Antonio García Martínez and Santiago de la Moya Cerero*

Tetrahedron: Asymmetry *19 (2008) 269*



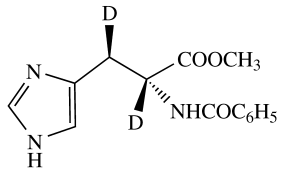
$C_{15}H_{28}N_2O$

(1*R*)-10-(4-Methylpiperazin-1-yl)isoborneol

Source of chirality: (1*S*)-ketopinic acid
$[\alpha]_D^{20} = -66.2$ (*c* 0.20, CH_2Cl_2)
Absolute configuration: (1*R*,2*R*,4*R*)

E. Cesarotti,* I. Rimoldi, D. Zerla and G. Aldini

Tetrahedron: Asymmetry *19 (2008) 273*

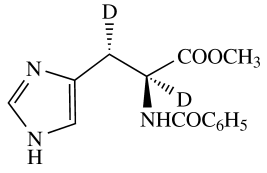


(2*R*,3*S*)-Methyl 2-benzamido-3-(1*H*-imidazol-4-yl)(2,3-dideutero)propanoate

$[\alpha]_D^{25} = +72.1$ (*c* 0.5, HBF_4 1.6 M in CH_3OH)
Absolute configuration: (2*R*,3*S*)

E. Cesarotti,* I. Rimoldi, D. Zerla and G. Aldini

Tetrahedron: Asymmetry *19 (2008) 273*

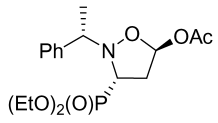


(2*S*,3*R*)-Methyl 2-benzamido-3-(1*H*-imidazol-4-yl)(2,3-dideutero)propanoate

$[\alpha]_D^{25} = -70.7$ (*c* 0.5, HBF_4 1.6 M in CH_3OH)
Absolute configuration: (2*S*,3*R*)

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*



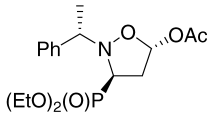
$C_{17}H_{26}NO_6P$

Diethyl (3*S*,5*R*)-5-acetoxy-2-[(*S*)-1-phenylethyl]isoxazolidinyl-3-phosphonate

Ee = 100%
$[\alpha]_D^{20} = -128.1$ (*c* 1.4, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (3*S*,5*R*,1′*S*)

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

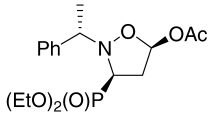


Ee = 100%
$[\alpha]_D^{20} = -17.8$ (*c* 1.2, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (3*R*,5*S*,1′*S*)

$C_{17}H_{26}NO_6P$
Diethyl (3*R*,5*S*)-5-acetoxy-2-[(*S*)-1-phenylethyl]isoxazolidinyl-3-phosphonate

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

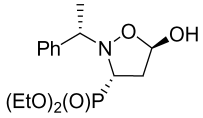


Ee = 100%
$[\alpha]_D^{20} = -107.5$ (*c* 0.9, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (3*R*,5*R*,1′*S*)

$C_{17}H_{26}NO_6P$
Diethyl (3*R*,5*R*)-5-acetoxy-2-[(*S*)-1-phenylethyl]isoxazolidinyl-3-phosphonate

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

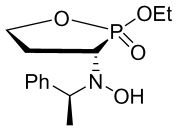


Ee = 100%
$[\alpha]_D^{20} = -71.5$ (*c* 1.4, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (3*S*,5*R*,1′*S*)

$C_{15}H_{24}NO_5P$
(3*S*,5*R*)-5-Hydroxy-2-((*S*)-1-phenylethyl)isoxazolidinyl-3-phosphonate

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

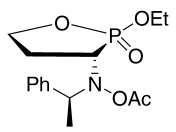


Ee = 100%
$[\alpha]_D^{20} = -18.1$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (2*S*,3*S*,1′*S*)

$C_{13}H_{20}NO_4P$
(2*S*,3*S*)-2-Ethoxy-2-oxo-3-{*N*-hydroxy-*N*-[(*S*)-1-phenylethyl]amino}-1,2-oxaphospholane

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

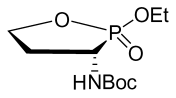


Ee = 100%
$[\alpha]_D^{20} = -5.2$ (*c* 0.9, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (2*S*,3*S*,1′*S*)

$C_{15}H_{22}NO_5P$
(2*S*,3*S*)-2-Ethoxy-2-oxo-3-{*N*-acetoxy-*N*-[(*S*)-1-phenylethyl]amino}-1,2-oxaphospholane

Dorota G. Piotrowska

Tetrahedron: Asymmetry *19 (2008) 279*

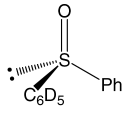


Ee = 100%
$[\alpha]_D^{20} = -33.8$ (*c* 0.9, $CHCl_3$)
Source of chirality: (*S*)-1-phenylethylamine
Absolute configuration: (2*S*,3*S*)

$C_{14}H_{27}N_4O_7P$
tert-Butyl (2*S*,3*S*)-2-ethoxy-2-oxo-1,2-oxaphospholan-3-ylcarbamate

Józef Drabowicz, Adrian Zajac, Piotr Lyzwa, Philip J. Stephens,* Jian-Jung Pan and Frank J. Devlin

Tetrahedron: Asymmetry *19 (2008) 288*

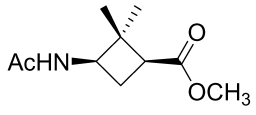


Ee = 98.4%
$[\alpha]_{400} = +3.08$ (*c* 2.11, CH_2Cl_2)
Source of chirality: VCD spectroscopy
Absolute configuration: *S*

$C_{12}H_5D_5SO$
Perdeuteriophenyl-phenyl-sulfoxide

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*



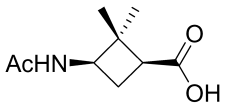
$[\alpha]_D = +111$ (*c* 2.9, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1*S*,3*R*)

$C_{10}H_{17}NO_3$
(1*S*,3*R*)-3-Acetamido-2,2-dimethylcyclobutane-1-carboxylic acid methyl ester

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +105$ (*c* 2.1, MeOH)
Source of chirality: (−)-verbenone
Absolute configuration: (1*S*,3*R*)



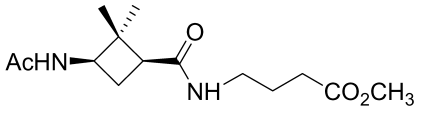
$C_9H_{15}NO_3$

(1*S*,3*R*)-3-Acetamido-2,2-dimethylcyclobutane-1-carboxylic acid

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +50$ (*c* 0.5, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1′*S*,3′*R*)



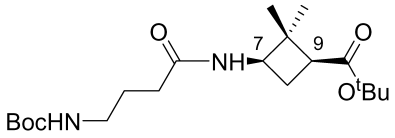
$C_{14}H_{24}N_2O_4$

Methyl 4-[(1′*S*,3′*R*)-3′-acetamido-2′,2′-dimethylcyclobutane-1′-carboxamido]-butanoate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +98$ (*c* 2.75, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (7*S*,9*R*)



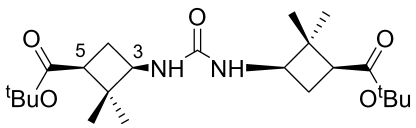
$C_{20}H_{36}N_2O_5$

tert-Butyl (7*S*,9*R*)-*N*-[(9-*tert*-butoxycarbonyl-8,8-dimethyl)-7-cyclobutyl]amino-carbonylpropyl-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +56$ (*c* 0.63, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (3*R*,5*S*,3′*R*,5′*S*)



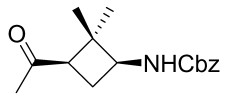
$C_{23}H_{40}N_2O_5$

(3*R*,5*S*,3*R*,5′*S*)-*N*,*N*′-Bis[(5-*tert*-butoxycarbonyl-4,4-dimethyl)-3-cyclobutyl]urea

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = -82$ (*c* 0.51, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1*S*,3*R*)

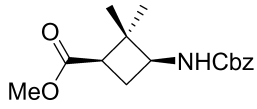


$C_{16}H_{21}NO_3$
Benzyl (1*S*,3*R*)-3-acetyl-2,2-dimethylcyclobutyl-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +36$ (*c* 4.05, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1*S*,3*R*)

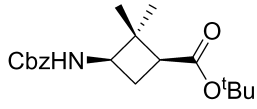


$C_{13}H_{21}NO_4$
Benzyl (1*S*,3*R*)-3-methoxycarbonyl-2,2-dimethylcyclobutyl-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

$[\alpha]_D = +31$ (*c* 0.7, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1*R*,3*S*)

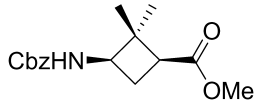


$C_{19}H_{27}NO_4$
Benzyl (1*R*,3*S*)-3-*tert*-butoxycarbonyl-2,2-dimethylcyclobutyl-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*

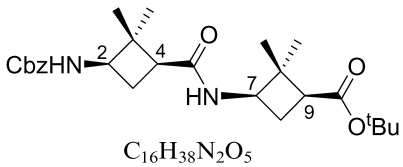
$[\alpha]_D = +34$ (*c* 3.11, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (1*R*,3*S*)



$C_{13}H_{21}NO_4$
Benzyl (1*R*,3*S*)-3-methoxycarbonyl-2,2-dimethylcyclobutyl-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*



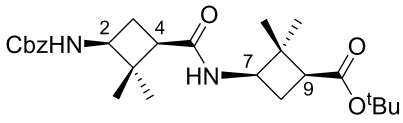
$[\alpha]_D = +30$ (*c* 0.7, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (2*R*,4*S*,7*R*,9*S*)

$C_{16}H_{38}N_2O_5$

Benzyl (2*R*,4*S*,7*R*,9*S*)-[(9-*tert*-butoxycarbonyl-8,8-dimethyl)-7-cyclobutyl]-[(4-aminocarbonyl-3,3-dimethyl-2-cyclobutyl)]-1-carbamate

Jordi Aguilera, Albertina G. Moglioni, Graciela Y. Moltrasio and Rosa M. Ortuño*

Tetrahedron: Asymmetry *19 (2008) 302*



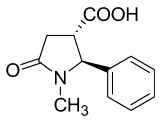
$[\alpha]_D = 43$ (*c* 0.71, CH_2Cl_2)
Source of chirality: (−)-verbenone
Absolute configuration: (2*S*,4*R*,7*R*,9*S*)

$C_{16}H_{38}N_2O_5$

Benzyl (2*S*,4*R*,7*R*,9*S*)-[(9-*tert*-butoxycarbonyl-8,8-dimethyl)-7-cyclobutyl]-[(4-aminocarbonyl-3,3-dimethyl-2-cyclobutyl)]-1-carbamate

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



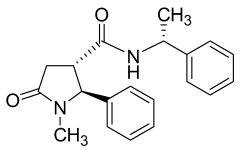
$[\alpha]_D^{23} = +112.0$ (*c* 0.9, $CHCl_3$)
Source of chirality: resolution with brucine
Absolute configuration: (2*S*,3*S*)

$C_{12}H_{13}NO_3$

(2*S*,3*S*)-1-Methyl-5-oxo-2-phenyltetrahydro-1*H*-pyrrolidine-3-carboxylic acid

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



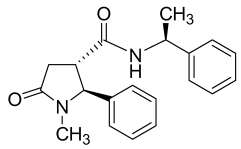
$[\alpha]_D^{23} = +71.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*R*)]

$C_{20}H_{22}N_2O_2$

(2*S*,3*S*)-1-Methyl-5-oxo-2-phenyl-*N*-[(1*R*)-1-phenylethyl]tetrahydro-1*H*-pyrrolidine-3-carboxoamide

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



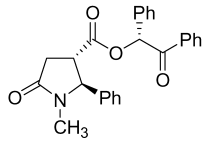
$C_{20}H_{22}N_2O_2$

(2*S*,3*S*)-1-Methyl-5-oxo-2-phenyl-*N*-[(1*S*)-1-phenylethyl]tetrahydro-1*H*-pyrrolidine-3-carboxoamide

$[\alpha]_D^{23} = -10.3$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*S*)]

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



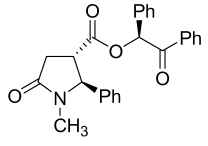
$C_{26}H_{23}NO_4$

(1*R*)-2-Oxo-1,2-diphenyl-ethyl (2*S*,3*S*)-1-methyl-5-oxo-2-phenyltetrahydro-1*H*-pyrrolidine-3-carboxylate

$[\alpha]_D^{23} = -34.2$ (*c* 1.1, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*R*)]

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



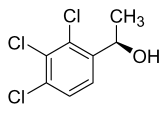
$C_{26}H_{23}NO_4$

(1*S*)-2-Oxo-1,2-diphenyl-ethyl (2*S*,3*S*)-1-methyl-5-oxo-2-phenyltetrahydro-1*H*-pyrrolidine-3-carboxylate

$[\alpha]_D^{23} = +150.8$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*S*)]

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



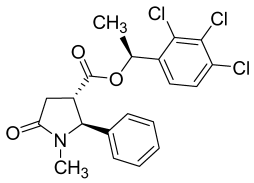
$C_8H_7Cl_3O$

(1*R*)-1-(2,3,4-Trichlorophenyl)ethanol

$[\alpha]_D^{23} = +62.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: resolution by the formation of diastereomeric esters
Absolute configuration: (1*R*)

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



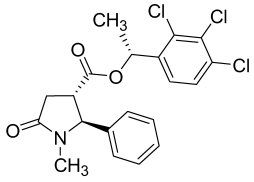
$[\alpha]_D^{23} = +49.5$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*S*)]

$C_{20}H_{18}Cl_3NO_3$

(1*S*)-1-(2,3,4-Trichlorophenyl)ethyl (2*S*,3*S*)-1-methyl-5-oxo-2-phenyltetrahydro-1*H*-pyrrolidine-3-carboxylate

Katarzyna Piwowarczyk, Anna Zawadzka, Piotr Roszkowski, Joanna Szawkało, Andrzej Leniewski, Jan K. Maurin, Darius Kranz and Zbigniew Czarnocki*

Tetrahedron: Asymmetry *19 (2008) 309*



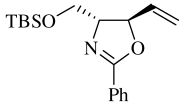
$[\alpha]_D^{23} = +36.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: diastereoselective synthesis
Absolute configuration: (2*S*,3*S*)-[(1*R*)]

$C_{20}H_{18}Cl_3NO_3$

(1*R*)-1-(2,3,4-Trichlorophenyl)ethyl (2*S*,3*S*)-1-methyl-5-oxo-2-phenyltetrahydro-1*H*-pyrrolidine-3-carboxylate

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



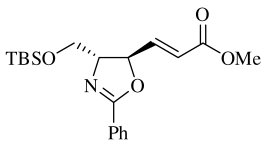
$[\alpha]_D^{25} = +3.7$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (4*R*,5*R*)

$C_{18}H_{27}NO_2Si$

(4*R*,5*R*)-4-((*tert*-Butyldimethylsilyloxy)methyl)-2-phenyl-5-vinyl-4,5-dihydrooxazole

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



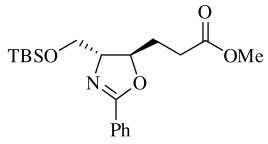
$[\alpha]_D^{25} = -75.2$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (4*R*,5*R*)

$C_{20}H_{29}NO_4Si$

(*E*)-Methyl 3-((4*R*,5*R*)-4-((*tert*-butyldimethylsilyloxy)methyl)-2-phenyl-4,5-dihydrooxazol-5-yl)acrylate

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



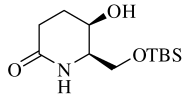
$[\alpha]_D^{25} = +47.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (4*R*,5*R*)

$C_{20}H_{31}NO_4Si$

Methyl 3-((4*R*,5*R*)-4-((*tert*-butyldimethylsilyloxy)methyl)-2-phenyl-4,5-dihydrooxazol-5-yl)propanoate

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



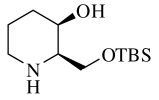
$[\alpha]_D^{25} = +10.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (5*R*,6*R*)

$C_{12}H_{25}NO_3Si$

(5*R*,6*R*)-6-((*tert*-Butyldimethylsilyloxy)methyl)-5-hydroxypiperidin-2-one

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



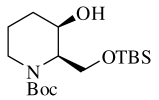
$[\alpha]_D^{25} = +3.0$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

$C_{12}H_{27}NO_2Si$

(2*R*,3*R*)-2-((*tert*-Butyldimethylsilyloxy)methyl)piperidin-3-ol

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



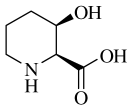
$[\alpha]_D^{25} = +29.25$ (*c* 0.5, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

$C_{17}H_{35}NO_4Si$

(2*R*,3*R*)-*tert*-Butyl 2-((*tert*-butyldimethylsilyloxy)methyl)-3-hydroxypiperidine-1-carboxylate

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



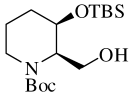
$C_6H_{11}NO_3$

(2*S*,3*R*)-3-Hydroxypiperidine-2-carboxylic acid

$[\alpha]_D^{25} = -53.8$ (*c* 0.6, H_2O)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (2*S*,3*R*)

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



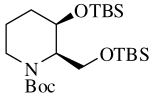
$C_{17}H_{35}NO_4Si$

(2*R*,3*R*)-*tert*-Butyl 3-(*tert*-butyldimethylsilyloxy)-2-(hydroxymethyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = -17.1$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

Van-Thoai Pham, Jae-Eun Joo, Yong-Shou Tian, Yun-Sung Chung, Kee-Young Lee, Chang-Young Oh and Won-Hun Ham*

Tetrahedron: Asymmetry *19 (2008) 318*



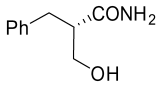
$C_{23}H_{49}NO_4Si_2$

(2*R*,3*R*)-*tert*-Butyl 3-(*tert*-butyldimethylsilyloxy)-2-((*tert*-butyldimethylsilyloxy)methyl)piperidine-1-carboxylate

$[\alpha]_D^{25} = -13.6$ (*c* 0.5, $CHCl_3$)
Source of chirality: D-serine, asymmetric synthesis
Absolute configuration: (2*R*,3*R*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



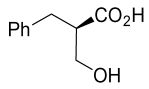
$C_{10}H_{12}NO_2$

(*S*)-2-Hydroxymethyl-3-phenylpropionamide

Ee = 65.4%
$[\alpha]_D^{25} = -31.3$ (*c* 6.08, EtOH)
Source of chirality: enzymatic synthesis
Absolute configuration: (*S*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



$C_{10}H_{12}O_3$

(*R*)-2-Hydroxymethyl-3-phenylpropionic acid

Ee = 86.4%

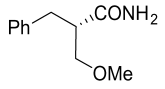
$[\alpha]_D^{25} = +13.5$ (*c* 3.10, $CHCl_3$)

Source of chirality: enzymatic synthesis

Absolute configuration: (*R*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



$C_{11}H_{15}NO_2$

(*S*)-2-Methoxymethyl-3-phenylpropionamide

Ee = 96.2%

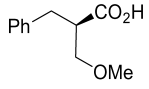
$[\alpha]_D^{25} = -9.7$ (*c* 3.91, $CHCl_3$)

Source of chirality: enzymatic synthesis

Absolute configuration: (*S*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



$C_{11}H_{14}O_3$

(*R*)-2-Methoxymethyl-3-phenylpropionic acid

Ee = 96.2%

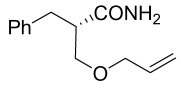
$[\alpha]_D^{25} = +4.0$ (*c* 6.74, cyclohexane)

Source of chirality: enzymatic synthesis

Absolute configuration: (*R*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



$C_{13}H_{17}NO_2$

(*S*)-2-Allyloxymethyl-3-phenylpropionamide

Ee = 57.6%

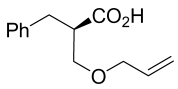
$[\alpha]_D^{25} = +2.8$ (*c* 4.27, $CHCl_3$)

Source of chirality: enzymatic synthesis

Absolute configuration: (*S*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



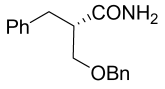
$C_{13}H_{16}O_3$

(*R*)-2-Allyloxymethyl-3-phenylpropionic acid

Ee = 54.6%
$[\alpha]_D^{25} = 0$ (*c* 3.10, $CHCl_3$)
Source of chirality: enzymatic synthesis
Absolute configuration: (*R*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



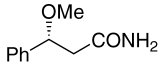
$C_{17}H_{19}NO_2$

(*S*)-2-Benzyloxymethyl-3-phenylpropionamide

Ee = 68.4%
$[\alpha]_D^{25} = -10.0$ (*c* 2.39, $CHCl_3$)
Source of chirality: enzymatic synthesis
Absolute configuration: (*S*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



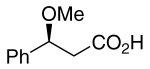
$C_{10}H_{13}NO_2$

(*R*)-2-Methoxymethyl-3-phenylpropionamide

Ee >99.9%
$[\alpha]_D^{25} = +111.9$ (*c* 3.20, $CHCl_3$)
Source of chirality: enzymatic synthesis
Absolute configuration: (*R*)

Da-You Ma, De-Xian Wang, Jie Pan, Zhi-Tang Huang and Mei-Xiang Wang*

Tetrahedron: Asymmetry *19 (2008) 322*



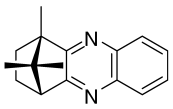
$C_{10}H_{12}O_3$

(*S*)-2-Hydroxymethyl-3-phenylpropionic acid

Ee = 64.5%
$[\alpha]_D^{25} = -41$ (*c* 1.83, $CHCl_3$)
Source of chirality: enzymatic synthesis
Absolute configuration: (*S*)

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



$C_{16}H_{18}N_2$

(1*S*,4*R*)-1,11,11-Trimethyl-1,2,3,4-tetrahydro-1,4-methanophenazine

De = 100%

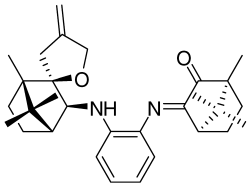
$[\alpha]_{589}^{21} = -29.0$ (*c* 0.30, $CHCl_3$)

Source of chirality: (1*S*)-(+)-camphorquinone

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

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



$C_{30}H_{40}N_2O_2$

N^1-[(1*S*,3*E*,4*R*)-2-Oxo-1,7,7-trimethylbicyclo[2.2.1]hept-3-ylidene]-N^2-{(1*S*,2*R*,3*S*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}benzene-1,2-diamine

De = 100%

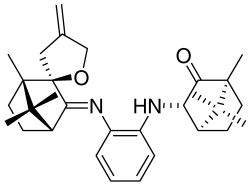
$[\alpha]_{589}^{18} = -854.4$ (*c* 0.09, $CHCl_3$)

Source of chirality: (1*S*)-(+)-camphorquinone

Absolute configuration: N^1-(1*S*,3*E*,4*R*)^1-N^2-(1*S*,2*R*,3*S*,4*R*)

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



$C_{30}H_{40}N_2O_2$

N^1-[(1*S*,3*S*,4*R*)-2-Oxo-1,7,7-trimethylbicyclo[2.2.1]hept-3-yl]-N^2-{(1*S*,2*R*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro-[bicyclo[2.2.1]heptane-2,2′-furan]-3-ylidene}benzene-1,2-diamine

De = 46%

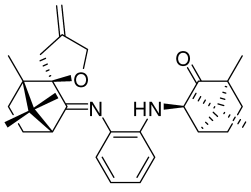
$[\alpha]_{589}^{18} = -11.3$ (*c* 0.20, $CHCl_3$)

Source of chirality: (1*S*)-(+)-camphorquinone

Absolute configuration: N^1-(1*S*,3*S*,4*R*)-N^2-(1*S*,2*R*,4*R*)

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



$C_{30}H_{40}N_2O_2$

N^1-[(1*S*,3*R*,4*R*)-2-Oxo-1,7,7-trimethylbicyclo[2.2.1]hept-3-yl]-N^2-{(1*S*,2*R*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro-[bicyclo[2.2.1]heptane-2,2′-furan]-3-ylidene}benzene-1,2-diamine

De = 100%

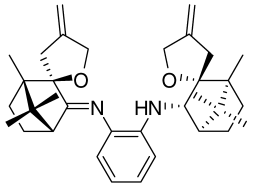
$[\alpha]_{589}^{18} = -71.9$ (*c* 0.21, $CHCl_3$)

Source of chirality: (1*S*)-(+)-camphorquinone

Absolute configuration: N^1-(1*S*,3*R*,4*R*)-N^2-(1*S*,2*R*,4*R*)

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



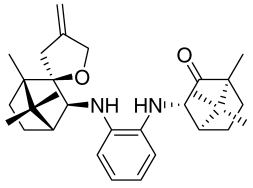
De = 100%
$[\alpha]_{589}^{18} = -115.0$ (*c* 0.21, $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: N^1-(1*S*,2*R*,3*S*,4*R*)-N^2-(1*S*,2*R*,3*E*,4*R*)

$C_{34}H_{46}N_2O_2$

N^1-{(1*S*,2*R*,3*S*,4*R*)-1,7,7-Trimethyl-4′-methylenedihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}-N^2-{(1*S*,2*R*,3*E*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-ylidene}benzene-1,2-diamine

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



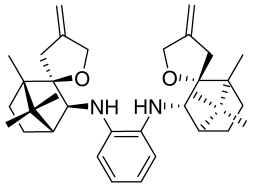
De = 100%
$[\alpha]_{589}^{21} = +42.2$ (*c* 0.06, $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: N^1-(1*S*,3*S*,4*R*)-N^2-(1*S*,2*R*,3*S*,4*R*)

$C_{30}H_{42}N_2O_2$

N^1-[(1*S*,3*S*,4*R*)-2-Oxo-1,7,7-trimethylbicyclo[2.2.1]hept-3-yl]-N^2-{(1*S*,2*R*,3*S*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro-[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}benzene-1,2-diamine

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



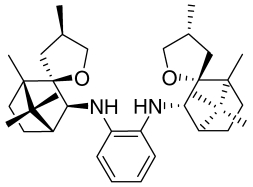
De = 100%
$[\alpha]_{589}^{22} = +189.0$ (*c* 0.17, $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: bis(1*S*,2*R*,3*S*,4*R*)

$C_{34}H_{48}N_2O_2$

N^1,N^2-Bis{(1*S*,2*R*,3*S*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}benzene-1,2-diamine

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



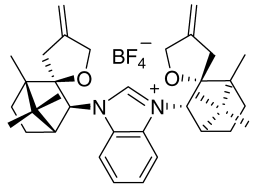
De = 100%
$[\alpha]_{589}^{21} = +93.1$ (*c* 0.12, $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: bis(1*S*,2*R*,3*S*,4*R*,4′*R*)

$C_{34}H_{52}N_2O_2$

N^1,N^2-Bis{(1*S*,2*R*,3*S*,4*R*,4′*R*)-1,4′,7,7-tetramethyldihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}benzene-1,2-diamine

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



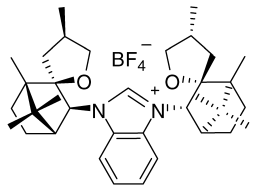
De = 100%
$[\alpha]_{589}^{23} = +64.8$ (*c* 0.23, $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: bis(1*S*,2*R*,3*S*,4*R*)

$C_{35}H_{47}BF_4N_2O_2$

1,3-Bis{(1*S*,2*R*,3*S*,4*R*)-1,7,7-trimethyl-4′-methylenedihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}-1*H*-benzo[*d*]imidazol-3-ium tetrafluoroborate

Uroš Grošelj, Anton Meden, Branko Stanovnik and Jurij Svete*

Tetrahedron: Asymmetry *19 (2008) 330*



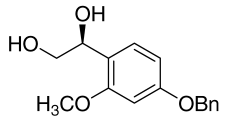
De = 100%
$[\alpha]_{589}^{22} = +54.7$ (*c* 0.09 $CHCl_3$)
Source of chirality: (1*S*)-(+)-camphorquinone
Absolute configuration: bis(1*S*,2*R*,3*S*,4*R*,4′*R*)

$C_{35}H_{41}BF_4N_2O_2$

1,3-Bis{(1*S*,2*R*,3*S*,4*R*,4′*R*)-1,4′,7,7-tetramethyldihydro-3′*H*-spiro[bicyclo[2.2.1]heptane-2,2′-furan]-3-yl}-1*H*-benzo[*d*]imidazol-3-ium tetrafluoroborate

Xing Huo, Xingfeng Ren, Yanfen Xu, Xinyun Li, Xuegong She* and Xinfu Pan*

Tetrahedron: Asymmetry *19 (2008) 343*



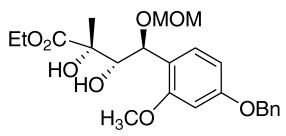
Ee > 98% [by chiral HPLC]
$[\alpha]_D^{25} = +21.6$ (*c* 4.0, $CHCl_3$)
Source of chirality: AD-mix-α

$C_{22}H_{32}O_4$

(*S*)-1-(4-(Benzyloxy)-2-methoxyphenyl)ethane-1,2-diol

Xing Huo, Xingfeng Ren, Yanfen Xu, Xinyun Li, Xuegong She* and Xinfu Pan*

Tetrahedron: Asymmetry *19 (2008) 343*



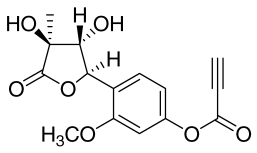
De = 86%
$[\alpha]_D^{25} = +20.0$ (*c* 2.0, $CHCl_3$)
Source of chirality: AD-mix-α

$C_{23}H_{30}O_9$

(2*R*,3*S*,4*S*)-Ethyl 4-(4-(benzyloxy)-2-methoxyphenyl)-2,3-dihydroxy-4-(methoxymethoxy)-2-methylbutanoate

Xing Huo, Xingfeng Ren, Yanfen Xu, Xinyun Li, Xuegong She* and Xinfu Pan*

Tetrahedron: Asymmetry *19 (2008) 343*



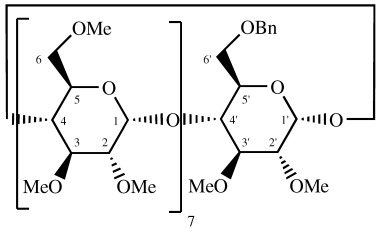
$[\alpha]_D^{25} = +17.0$ (c 1.0, $CHCl_3$)
Source of chirality: AD-mix-α

$C_{26}H_{34}O_8$

4-((2*R*,3*R*,4*S*)-Tetrahydro-3,4-dihydroxy-4-methyl-5-oxofuran-2-yl)-3-methoxyphenyl propiolate

Thomas Chaise, Pascal Cardinael, Séverine Tisse, Jean-Claude Combret and Jean-Philippe Bouillon*

Tetrahedron: Asymmetry *19 (2008) 348*



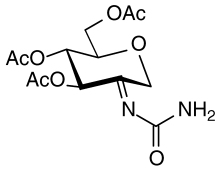
$[\alpha]_D = +0.3$ (c 1.64, EtOH)
Ee = 98%
Source of chirality: enantiopure reactant

$C_{78}H_{132}O_{40}$

6^{I}-*O*-Benzyl-$2^{I–VIII}$, $3^{I–VIII}$, $6^{II–VIII}$-tricosa-*O*-methylcyclomaltooctaose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



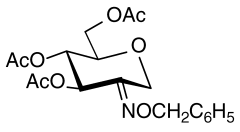
$[\alpha]_D^{20} = -72.5$ (c 0.2, $CHCl_3$)
Source of chirality: D-glucose

$C_{13}H_{19}N_3O_8$

3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose semicarbazone

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



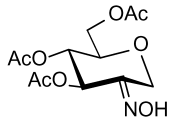
$[\alpha]_D^{21} = -39$ (c 0.5, $CHCl_3$)
Source of chirality: D-glucose

$C_{19}H_{23}NO_8$

3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose *O*-benzyloxime

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{12}H_{17}NO_8$

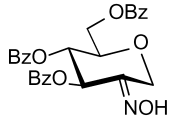
3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose *E*-oxime

$[\alpha]_D^{20} = -42.8$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{27}H_{23}NO_8$

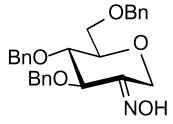
3,4,6-Tri-*O*-benzoyl-1,5-anhydro-D-fructose *E*-oxime

$[\alpha]_D^{22} = -52.9$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{27}H_{29}NO_5$

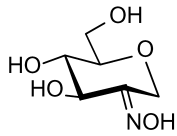
3,4,6-Tri-*O*-benzyl-1,5-anhydro-D-fructose *E*-oxime

$[\alpha]_D^{20} = -29.0$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_6H_{11}NO_5$

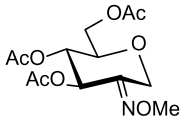
1,5-Anhydro-D-fructose *E*-oxime

$[\alpha]_D^{21} = -43.0$ (*c* 0.3, water)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{13}H_{19}NO_8$

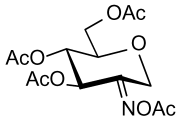
3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose *O*-methyloxime

$[\alpha]_D^{21} = -29$ (*c* 1, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{14}H_{19}NO_9$

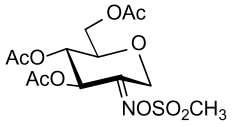
3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose *O*-acetyloxime

$[\alpha]_D^{21} = -49$ (*c* 0.3, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{13}H_{19}NO_{10}S$

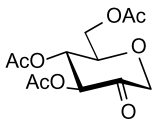
3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose *O*-methanesulfonyloxime

$[\alpha]_D^{22} = -56.6$ (*c* 0.3, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{12}H_{16}O_8$

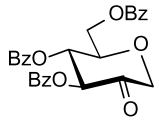
3,4,6-Tri-*O*-acetyl-1,5-anhydro-D-fructose

$[\alpha]_D^{21} = -10$ (*c* 0.5, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{27}H_{22}O_8$

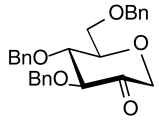
3,4,6-Tri-*O*-benzoyl-1,5-anhydro-D-fructose

$[\alpha]_D^{20} = -29.2$ (*c* 0.6, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{27}H_{28}O_5$

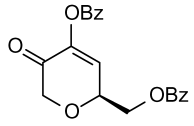
3,4,6-Tri-*O*-benzyl-1,5-anhydro-D-fructopyranose

$[\alpha]_D^{20} = -16.1$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{20}H_{16}O_6$

(6*S*)-4-Benzoyloxy-6-benzoyloxymethyl-2*H*-pyran-3(6*H*)-one

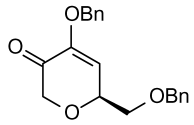
$[\alpha]_D^{20} = -16.0$ (*c* 1.0, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{20}H_{20}O_4$

(6*S*)-4-Benzyloxy-6-benzyloxymethyl-2*H*-pyran-3(6*H*)-one

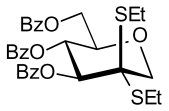
$[\alpha]_D^{20} = -32.1$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{31}H_{32}O_7S_2$

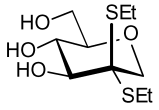
3,4,6-Tri-*O*-benzoyl-1,5-anhydro-D-fructose diethyldithioacetal

$[\alpha]_D^{23} = -51$ (*c* 1.1, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{10}H_{20}O_4S_2$

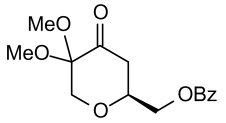
1,5-Anhydro-D-fructose diethyldithioacetal

$[\alpha]_D^{24} = -49.8$ (*c* 1, $CHCl_3$)

Source of chirality: D-glucose

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{15}H_{18}O_6$

(6*S*)-6-Benzoyloxymethyl-3,3-dimethoxy-tetrahydropyran-4-one

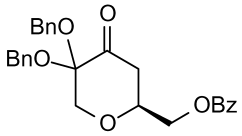
$[\alpha]_D^{20} = -85.6$ (*c* 1.2, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{27}H_{26}O_6$

(6*S*)-6-Benzoyloxymethyl-3,3-di(benzyloxy)-tetrahydropyran-4-one

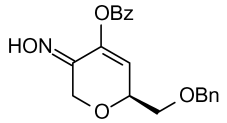
$[\alpha]_D = -94.8$ (*c* 1.2, $CHCl_3$)

Source of chirality: D-glucose

Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



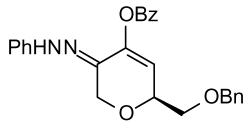
$C_{20}H_{17}NO_6$

(6*S*)-4-Benzoyloxy-6-benzoyloxymethyl-2*H*-pyran-3(6*H*)-one oxime

$[\alpha]_D^{21} = -22$ (*c* 0.6, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{26}H_{22}N_2O_5$

(6*S*)-4-Benzoyloxy-6-benzoyloxymethyl-2*H*-pyran-3(6*H*)-one phenylhydrazone

$[\alpha]_D^{20} = -14$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (6*S*)

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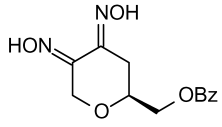
Tetrahedron: Asymmetry *19 (2008) 358*



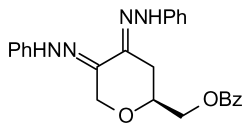
$C_{13}H_{14}N_2O_5$

(6*S*)-6-Benzyloxymethyl-tetrahydropyran-3,4-dione dioxime

$[\alpha]_D^{21} = -111$ (*c* 0.5, pyridine)
Source of chirality: D-glucose
Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



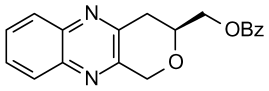
$C_{25}H_{24}N_4O_3$

(6*S*)-6-Benzyloxymethyl-tetrahydropyran-3,4-dione bis(phenylhydrazone)

$[\alpha]_D^{20} = -114.3$ (*c* 1.0, $CHCl_3$)
$[\alpha]_D^{20} = -64.3$ (*c* 1.0, pyridine)
Source of chirality: D-glucose
Absolute configuration: (6*S*)

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$C_{19}H_{16}N_2O_3$

(3*S*)-3-Benzyloxymethyl-3,4-dihydro-1*H*-pyrano[3,4-*b*]quinoxaline

$[\alpha]_D = -81.3$ (*c* 1.1, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (3*S*)

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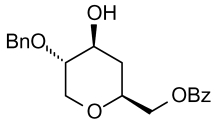
Tetrahedron: Asymmetry *19 (2008) 358*



$C_{20}H_{20}O_6$

(2*S*,4*S*,5*R*)-4-Benzoyloxy-2-benzoyloxymethyl-5-hydroxy-tetrahydropyran

$[\alpha]_D^{25} = -18.6$ (*c* 1.0, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*S*,4*S*,5*R*)

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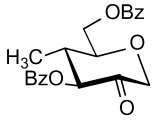
Tetrahedron: Asymmetry *19 (2008) 358*



$C_{21}H_{22}O_7$

3,6-Di-*O*-benzoyl-4-deoxy-4-*C*-methyl-1,5-anhydro-D-fructose

$[\alpha]_D^{20} = -6.3$ (*c* 0.5, $CHCl_3$)
Source of chirality: D-glucose

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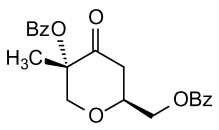
Tetrahedron: Asymmetry *19 (2008) 358*



$C_{21}H_{20}O_6$

(2*S*,5*S*)-5-Benzoyloxy-2-benzoyloxymethyl-5-methyl-tetrahydropyran-4-one

$[\alpha]_D^{20} = -89$ (*c* 1, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*S*,5*S*)

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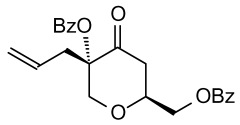
Tetrahedron: Asymmetry *19 (2008) 358*

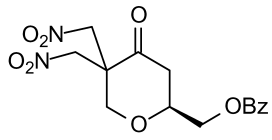


$[\alpha]_D^{20} = -65$ (*c* 0.7, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*S*,6*S*)

$C_{23}H_{22}O_6$
(2*S*,5*S*)-5-Allyl-5-benzoyloxy-2-benzoyloxymethyl-tetrahydropyran-4-one

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



$[\alpha]_D^{20} = -34.2$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*S*)

$C_{15}H_{16}N_2O_8$
(2*S*)-2-Benzoyloxymethyl-5,5-bis(nitromethyl)-tetrahydropyran-4-one

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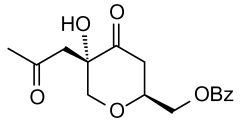
Tetrahedron: Asymmetry *19 (2008) 358*



$[\alpha]_D^{20} = -31.6$ (*c* 1.2, $CHCl_3$)
Source of chirality: D-glucose
Absolute configuration: (2*S*,5*S*)

$C_{16}H_{18}O_6$
(2*S*,5*S*)-2-Benzoyloxymethyl-5-hydroxy-5-acetonyl-tetrahydropyran-4-one

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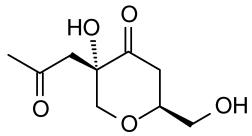
Tetrahedron: Asymmetry *19 (2008) 358*

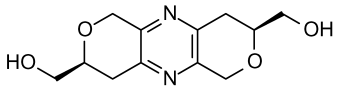


$[\alpha]_D^{20} = -69.4$ (*c* 1.2, EtOH)
Source of chirality: D-glucose
Absolute configuration: (2*S*,5*S*)

$C_9H_{14}O_5$
(−)-Bissetone[(2*S*,5*S*)-5-acetonyl-5-hydroxy-2-hydroxymethyl-tetrahydropyran-4-one]

Manfred Brehm, Volker H. Göckel, Pan Jarglis and Frieder W. Lichtenthaler*

Tetrahedron: Asymmetry *19 (2008) 358*



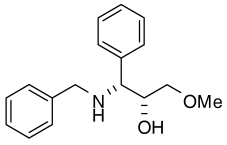
$C_{12}H_{16}N_2O_4$

S,*S*-Palythazine [(3*S*,8*S*)-1,3,4,6,8,9-hexahydro-dipyrano[3,4-*b*:3′,4′-*e*]pyrazine-3,8-dimethanol]

$[\alpha]_D = -198.8$ (*c* 0.35, CH_3OH)
Source of chirality: D-glucose
Absolute configuration: (3*S*,8*S*)

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



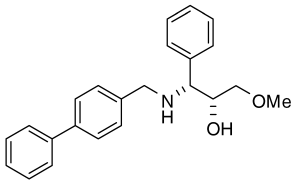
$C_{17}H_{21}NO_2$

(1*R*,2*R*)-1-(Benzylamino)-3-methoxy-1-phenylpropan-2-ol

Ee > 99.9%
$[\alpha]_D^{24} = -466.3$ (*c* 1.03, $CHCl_3$)
Source of chirality: Sharpless epoxidation of cinnamyl alcohol
Absolute configuration: (1*R*,2*R*)

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



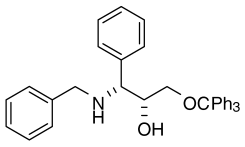
$C_{23}H_{25}NO_2$

(1*R*,2*R*)-1-(Biphenyl-4-ylmethylamino)-3-methoxy-1-phenylpropan-2-ol

Ee > 99.9%
$[\alpha]_D^{24} = -4.1$ (*c* 0.96, CH_2Cl_2)
Source of chirality: Sharpless epoxidation of cinnamyl alcohol
Absolute configuration: (1*R*,2*R*)

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



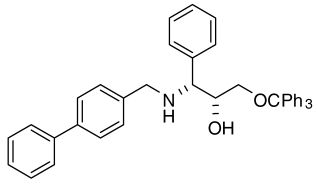
$C_{35}H_{33}NO_2$

(1*R*,2*R*)-1-(Benzylamino)-1-phenyl-3-(trityloxy)propan-2-ol

Ee > 99.9%
$[\alpha]_D^{22} = -117.2$ (*c* 0.67, $CHCl_3$)
Source of chirality: Sharpless epoxidation of cinnamyl alcohol
Absolute configuration: (1*R*,2*R*)

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



$C_{41}H_{37}NO_2$

(1*R*,2*R*)-1-(Biphenyl-4-ylmethylamino)-1-phenyl-3-(trityloxy)propan-2-ol

Ee > 99.9%

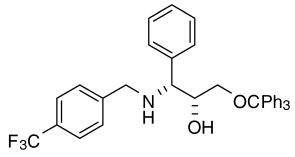
$[\alpha]_D^{22} = +34.9$ (*c* 1.09, $CHCl_3$)

Source of chirality: Sharpless epoxidation of cinnamyl alcohol

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

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



$C_{36}H_{32}F_3NO_2$

(1*R*,2*R*)-1-Phenyl-1-(4-trifuloromethyl)benzylamino-3-(trityloxy)propan-2-ol

Ee > 99.9%

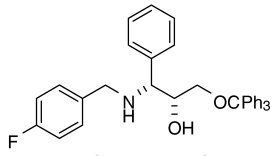
$[\alpha]_D^{23} = -221.7$ (*c* 0.99, $CHCl_3$)

Source of chirality: Sharpless epoxidation of cinnamyl alcohol

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

Esther Alza, Amaia Bastero, Susanna Jansat and Miquel A. Pericàs*

Tetrahedron: Asymmetry *19 (2008) 374*



$C_{35}H_{32}FNO_2$

(1*R*,2*R*)-1-(4-Fluorobenzylamino)-1-phenyl-3-(trityloxy)propan-2-ol

Ee > 99.9%

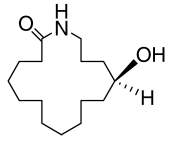
$[\alpha]_D^{23} = -193.7$ (*c* 0.99, $CHCl_3$)

Source of chirality: Sharpless epoxidation of cinnamyl alcohol

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

Chuan-Jin Hou, Xiao-Mei Liang, Jing-Ping Wu, Jia-Xing Huang, Jian-Jun Zhang and Dao-Quan Wang*

Tetrahedron: Asymmetry *19 (2008) 379*



$C_{15}H_{29}NO_2$

(*S*)-12-Hydroxyl-1,15-pentadecanlactam

Ee >99%

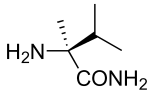
$[\alpha]_D^{20} = +10.03$ (*c* 0.46, $CHCl_3$)

Source of chirality: chiral resolution

Configuration: (*S*)

Pavel Drabina,* Miloš Sedlák, Aleš Růžička, Andrei V. Malkov and Pavel Kočovský

Tetrahedron: Asymmetry *19 (2008) 384*

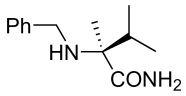


Ee >99%
$[\alpha]_D^{20} = -56.0$ (*c* 1.03, THF)
Source of chirality: diastereoisomeric resolution
Absolute configuration: (*S*)

$C_6H_{14}N_2O$
(*S*)-2-Amino-2,3-dimethylbutanamide

Pavel Drabina,* Miloš Sedlák, Aleš Růžička, Andrei V. Malkov and Pavel Kočovský

Tetrahedron: Asymmetry *19 (2008) 384*

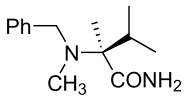


Ee >99%
$[\alpha]_D^{20} = +16.7$ (*c* 0.41, THF)
Absolute configuration: (*S*)

$C_{13}H_{20}N_2O$
(*S*)-2-*N*-Benzylamino-2,3-dimethylbutanamide

Pavel Drabina,* Miloš Sedlák, Aleš Růžička, Andrei V. Malkov and Pavel Kočovský

Tetrahedron: Asymmetry *19 (2008) 384*

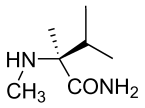


Ee >99%
$[\alpha]_D^{20} = +12.9$ (*c* 0.42, THF)
Absolute configuration: (*S*)

$C_{14}H_{22}N_2O$
(*S*)-2-*N*-Benzyl-*N*-methylamino-2,3-dimethylbutanamide

Pavel Drabina,* Miloš Sedlák, Aleš Růžička, Andrei V. Malkov and Pavel Kočovský

Tetrahedron: Asymmetry *19 (2008) 384*

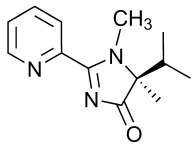


Ee >99%
$[\alpha]_D^{20} = -14.2$ (*c* 0.48, THF)
Absolute configuration: (*S*)

$C_7H_{16}N_2O$
(*S*)-2-*N*-Methylamino-2,3-dimethylbutanamide

Pavel Drabina,* Miloš Sedlák, Aleš Růžička, Andrei V. Malkov and Pavel Kočovský

Tetrahedron: Asymmetry *19 (2008) 384*



Ee >99%
$[\alpha]_D^{20} = -68.0$ (*c* 0.51, THF)
Absolute configuration: (*S*)

$C_{13}H_{17}N_3O$
(*S*)-(5-Isopropyl-1,5-dimethyl-4,5-dihydro-1*H*-imidazol-4-on-2-yl)pyridine

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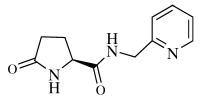
Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*



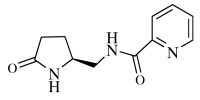
$[\alpha]_D^{20} = -22.2$ (*c* 0.5, chloroform)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (2*S*)

$C_{11}H_{13}N_3O_2$
UNIFIDE (2*S*)-5-Oxo-*N*-(pyridin-2-ylmethyl)pyrrolidine-2-carboxamide

---

Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*



$[\alpha]_D^{20} = +41.1$ (*c* 5.0, ethanol)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (2*S*)

$C_{11}H_{13}N_3O_2$
CROSIDE *N*-{[(2*S*)-5-Oxopyrrolidin-2-yl]methyl}pyridine-2-carboxamide

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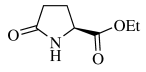
Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*



$[\alpha]_D^{20} = +2.4$ (*c* 10, ethanol)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (*S*)

$C_7H_{11}NO_3$
(*S*)-5-Oxopyrrolidine-2-carboxylic acid ethyl ester

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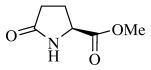
Tetrahedron: Asymmetry *19 (2008) 391*

$[\alpha]_D^{20} = -8.2$ (*c* 1.0, dichloromethane)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (*S*)

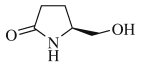


$C_6H_9NO_3$
Methyl-(*S*)-2-pyrrolidinone-5-carboxylate

Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*

$[\alpha]_D^{20} = +28.0$ (*c* 5.0, ethanol)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (*S*)



$C_5H_9NO_2$
(*S*)-5-(Hydroxymethyl)-2-pyrrolidone

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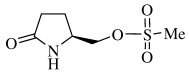
Tetrahedron: Asymmetry *19 (2008) 391*

$[\alpha]_D^{20} = +16.2$ (*c* 1.02, ethanol)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (2*S*)

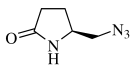


$C_6H_{11}NO_4S$
(2*S*)-5-Oxopyrrolidin-2-yl methyl methanesulfonate

Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*

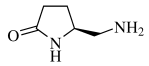
$[\alpha]_D^{20} = +72.8$ (*c* 5.0, ethanol)
Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid
Absolute configuration: (*S*)



$C_5H_8N_4O$
(*S*)-5-(Azidomethyl)-2-pyrrolidone

Lorraine Bateman, Simon W. Breeden and Patrick O'Leary*

Tetrahedron: Asymmetry *19 (2008) 391*



$C_5H_{10}N_2O$

(*S*)-5-(Aminomethyl)-2-pyrrolidone

$[\alpha]_D^{20} = +33.4$ (*c* 5.0, ethanol)

Source of chirality: (*S*)-(−)-2-pyrrolidone-5-carboxylic acid

Absolute configuration: (*S*)