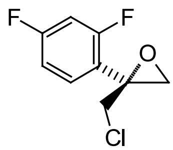
Nicolas Monfort, Alain Archelas and Roland Furstoss*

Tetrahedron: Asymmetry *13 (2002) 2399*



$C_9H_7OF_2Cl$

(*S*)-1-Chloro-2-(2,4-difluorophenyl)-2,3-epoxypropane

Ee = 98.3% (by chiral GC)

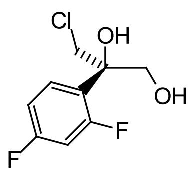
$[\alpha]_D^{26}$ = +45 (*c* 1.2; THF)

Source of chirality: enzymatic resolution using *A. niger* epoxide hydrolase

Absolute configuration: *S*

Nicolas Monfort, Alain Archelas and Roland Furstoss*

Tetrahedron: Asymmetry *13 (2002) 2399*



$C_9H_9O_2F_2Cl$

(*R*)-1-Chloro-2-(2,4-difluorophenyl)-propan-2,3-diol

Ee = 98.3%

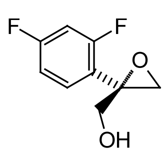
$[\alpha]_D^{26}$ = +3.6 (*c* 1; THF)

Source of chirality: enzymatic resolution using *A. niger* epoxide hydrolase

Absolute configuration: *R*

Nicolas Monfort, Alain Archelas and Roland Furstoss*

Tetrahedron: Asymmetry *13 (2002) 2399*



$C_9H_8O_2F_2$

(*R*)-2-(2,4-Difluorophenyl)-2,3-epoxypropanol

Ee = 98.3%

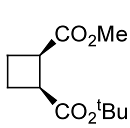
$[\alpha]_D^{26}$ = +44.6 (*c* 1; THF)

Source of chirality: enzymatic resolution using epoxide hydrolase from *A. niger*

Absolute configuration: *R*

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{11}H_{18}O_4$

tert-Butyl 2-methoxycarbonylcyclobutane-1-carboxylate

E.e. = 91%

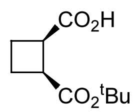
$[\alpha]_D$ = +4.0 (*c* 0.50, MeOH)

Source of chirality: chemoenzymatic hydrolysis

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

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{10}H_{16}O_4$

tert-Butyl 2-hydroxycarbonylcyclobutane-1-carboxylate

E.e. = 91%

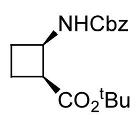
$[\alpha]_D = +9.3$ (*c* 1.08, MeOH)

Source of chirality: chemoenzymatic hydrolysis

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

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{17}H_{23}O_4$

tert-Butyl 2-methoxycarbonylaminocyclobutane-1-carboxylate

E.e. = 91%

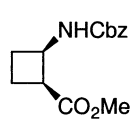
$[\alpha]_D = +41$ (*c* 0.42, $CHCl_3$)

Source of chirality: chemoenzymatic hydrolysis

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

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{14}H_{17}NO_4$

Methyl 2-benzyloxycarbonylaminocyclobutane-1-carboxylate

E.e. = 91%

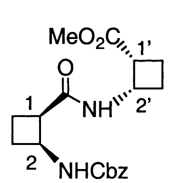
$[\alpha]_D = +83$ (*c* 0.70, $CHCl_3$)

Source of chirality: chemoenzymatic hydrolysis

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

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{19}H_{24}N_2O_5$

2-Benzyloxycarbonylaminocyclobutane-1-carboxylic acid *N*-(1′-methoxycarbonyl-2′-cyclobutyl)amide

E.e. = 91%

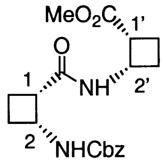
$[\alpha]_D = -108$ (*c* 1.79, MeOH)

Source of chirality: chemoenzymatic hydrolysis

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

Sandra Izquierdo, Marta Martín-Vilà, Albertina G. Moglioni, Vicenç Branchadell and Rosa M. Ortuño*

Tetrahedron: Asymmetry *13 (2002) 2403*



$C_{19}H_{24}N_2O_5$

2-Benzyloxycarbonylaminocyclobutane-1-carboxylic acid *N*-(1′-methoxycarbonyl-2′-cyclobutyl)amide

E.e. = 91%

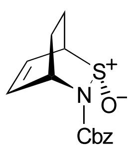
$[\alpha]_D = -63$ (*c* 1.59, MeOH)

Source of chirality: chemoenzymatic hydrolysis

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

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{14}H_{15}NO_3S$

Benzyl (1*R*,2*S*,4*S*)-2λ[4]-thia-3-azabicyclo[2.2.2]oct-5-ene-3-carboxylate 2-oxide

Ee = 50%

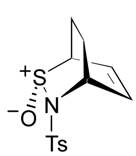
$[\alpha]_D^{20} = +134.6$ (*c* 1.1, CH_2Cl_2)

Source of chirality: asymmetric Diels–Alder reaction

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

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{13}H_{15}NO_3S_2$

(1*S*,2*R*,4*R*)-3-Tosyl-2λ[4]-thia-3-azabicyclo[2.2.2]oct-5-ene 2-oxide

Ee = 62%

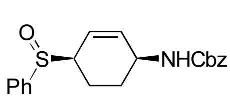
$[\alpha]_D^{20} = -166$ (*c* 1.03, CH_2Cl_2)

Source of chirality: asymmetric Diels–Alder reaction

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

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{20}H_{21}NO_3S$

Benzyl [(1*S*,4*R*)-4-(phenylsulfinyl)cyclohex-2-enyl]carbamate

Ee = 55%

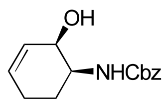
$[\alpha]_D^{20} = +202.3$ (*c* 1.0, $CHCl_3$)

Source of chirality: asymmetric Diels–Alder reaction

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

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{14}H_{17}NO_3$

Benzyl [(1*S*,2*R*)-2-hydroxycyclohex-3-enyl]carbamate

Ee = 58%

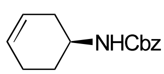
$[\alpha]_D^{20} = -55.8$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric Diels–Alder reaction

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

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{14}H_{17}NO_2$

Benzyl *N*-[(1*S*)-cyclohex-3-enyl]carbamate

Ee = 52%

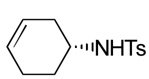
$[\alpha]_D^{20} = -13.9$ (*c* 0.90, CH_2Cl_2)

Source of chirality: asymmetric Diels–Alder reaction

Absolute configuration: 1*S*

Annette Bayer, Lars K. Hansen and Odd R. Gautun*

Tetrahedron: Asymmetry *13 (2002) 2407*



$C_{13}H_{17}NO_2S$

N-[(1*R*)-Cyclohex-3-enyl]-*p*-toluenesulfonamide

Ee = 64%

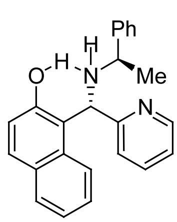
$[\alpha]_D^{20} = +2.0$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric Diels–Alder reaction

Absolute configuration: 1*R*

Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



$C_{24}H_{22}N_2O$

1-((*S*)-{[(1′*R*)-1′-Phenylethyl]amino}(pyridin-2-yl)methyl)-2-naphthol

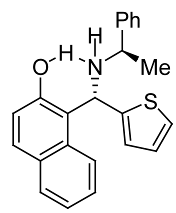
$[\alpha]_D^{20} = +10.9$ (*c* 1.9, $CHCl_3$)

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

Absolute configuration: 1*S*,1′*R*

Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



$[\alpha]_D^{20} = -154.6$ (*c* 1.3, $CHCl_3$)
Source of chirality: (*R*)-1-phenylethylamine
Absolute configuration: 1*S*,1′*R*

$C_{23}H_{21}NOS$

1-((*S*)-2-Thienyl{[(1′*R*)-1′-phenylethyl]amino}methyl)-2-naphthol

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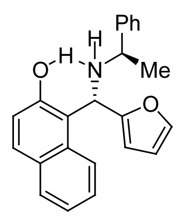
Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



$[\alpha]_D^{20} = -121.7$ (*c* 2.1, $CHCl_3$)
Source of chirality: (*R*)-1-phenylethylamine
Absolute configuration: 1*S*,1′*R*

$C_{23}H_{21}NO_2$

1-((*S*)-2-Furyl{[(1′*R*)-1′-phenylethyl]amino}methyl)-2-naphthol

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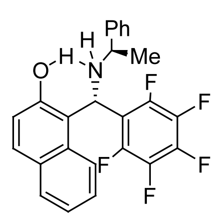
Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



$[\alpha]_D^{20} = -251.0$ (*c* 1.1, $CHCl_3$)
Source of chirality: (*R*)-1-phenylethylamine
Absolute configuration: 1*S*,1′*R*

$C_{25}H_{18}F_5NO$

1-((*S*)-(2,3,4,5,6-Pentafluorophenyl){[(1′*R*)-1′-phenylethyl]amino}methyl)-2-naphthol

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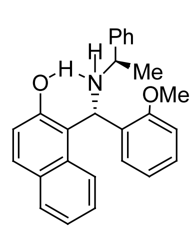
Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



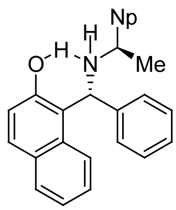
$[\alpha]_D^{20} = -267.5$ (*c* 1.7, $CHCl_3$)
Source of chirality: (*R*)-1-phenylethylamine
Absolute configuration: 1*S*,1′*R*

$C_{26}H_{25}NO_2$

1-((*S*)-(2-Methoxyphenyl){[(1′*R*)-1′-phenylethyl]amino}methyl)-2-naphthol

Cristina Cimarelli, Gianni Palmieri* and Emanuela Volpini

Tetrahedron: Asymmetry *13 (2002) 2417*



$C_{29}H_{25}NO$

1-((*R*)-Phenyl{[(1′*R*)-1′-(1-naphthyl)ethyl]amino}methyl)-2-naphthol

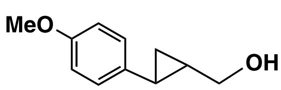
$[\alpha]_D^{20} = -288.1$ (*c* 1.0, $CHCl_3$)

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

Absolute configuration: *R*,*R*

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O_2$

3-(4-Methoxy)phenyl-2,3-methano-1-propanol

Ee = 76%

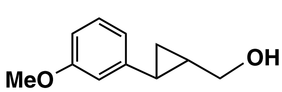
$[\alpha]_D^{19} = +54.2$ (*c* 1.07, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O_2$

3-(3-Methoxy)phenyl-2,3-methano-1-propanol

Ee = 78%

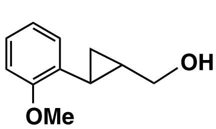
$[\alpha]_D^{19} = +52.1$ (*c* 1.19, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O_2$

3-(2-Methoxy)phenyl-2,3-methano-1-propanol

Ee = 56%

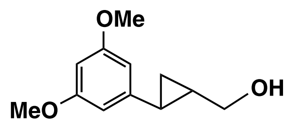
$[\alpha]_D^{19} = -23.0$ (*c* 1.00, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{12}H_{16}O_3$

3-(3,5-Dimethoxy)phenyl-2,3-methano-1-propanol

Ee = 82%

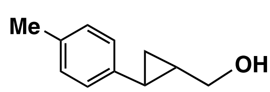
$[\alpha]_D^{15}$ = +43.3 (*c* 1.04, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O$

3-(4-Methyl)phenyl-2,3-methano-1-propanol

Ee = 80%

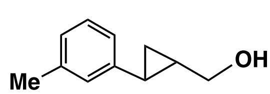
$[\alpha]_D^{18}$ = +66.1 (*c* 1.24, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O$

3-(3-Methyl)phenyl-2,3-methano-1-propanol

Ee = 70%

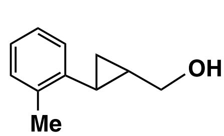
$[\alpha]_D^{26}$ = +52.5 (*c* 0.40, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{14}O$

3-(2-Methyl)phenyl-2,3-methano-1-propanol

Ee = 78%

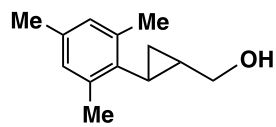
$[\alpha]_D^{22}$ = +55.1 (*c* 1.18, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{13}H_{18}O$

3-(2,4,6-Trimethyl)phenyl-2,3-methano-1-propanol

Ee = 51%

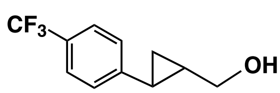
$[\alpha]_D^{15}$ = +45.4 (*c* 0.97, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{11}F_3O$

3-(4-Trifluoromethyl)phenyl-2,3-methano-1-propanol

Ee = 84%

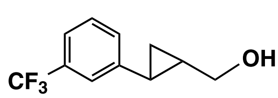
$[\alpha]_D^{22}$ = +53.4 (*c* 1.03, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{11}F_3O$

3-(3-Trifluoromethyl)phenyl-2,3-methano-1-propanol

Ee = 78%

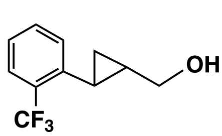
$[\alpha]_D^{26}$ = +35.9 (*c* 1.29, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{11}H_{11}F_3O$

3-(2-Trifluoromethyl)phenyl-2,3-methano-1-propanol

Ee = 86%

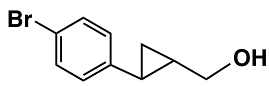
$[\alpha]_D^{26}$ = +53.8 (*c* 0.99, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{11}BrO$

3-(4-Bromo)phenyl-2,3-methano-1-propanol

Ee = 80%

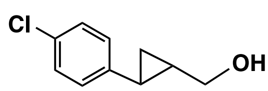
$[\alpha]_D^{17}$ = +55.1 (*c* 1.98, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{11}ClO$

3-(4-Chloro)phenyl-2,3-methano-1-propanol

Ee = 82%

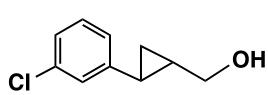
$[\alpha]_D^{17}$ = +64.0 (*c* 1.11, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{11}ClO$

3-(3-Chloro)phenyl-2,3-methano-1-propanol

Ee = 77%

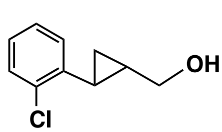
$[\alpha]_D^{14}$ = +57.8 (*c* 1.35, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{11}ClO$

3-(2-Chloro)phenyl-2,3-methano-1-propanol

Ee = 74%

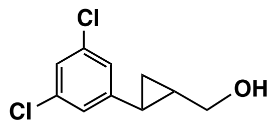
$[\alpha]_D^{15}$ = 0.0 (*c* 1.08, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{10}Cl_2O$

3-(3,5-Dichloro)phenyl-2,3-methano-1-propanol

Ee = 74%

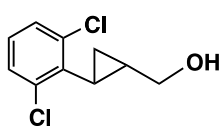
$[\alpha]_D^{24}$ = +49.5 (*c* 1.01, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{10}H_{10}Cl_2O$

3-(2,6-Dichloro)phenyl-2,3-methano-1-propanol

Ee = 74%

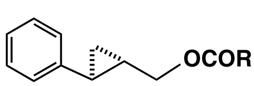
$[\alpha]_D^{17}$ = +62.6 (*c* 1.07, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{17}H_{14}N_2O_6$

3,5-Dinitrobenzoyl 3-phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 82%

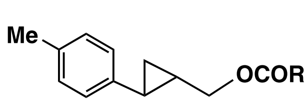
$[\alpha]_D^{23}$ = +38.8 (*c* 1.18, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

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

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{16}N_2O_6$

3,5-Dinitrobenzoyl 3-(4-methyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 80%

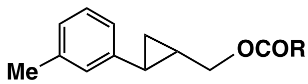
$[\alpha]_D^{21}$ = +40.0 (*c* 1.00, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{16}N_2O_6$

3,5-Dinitrobenzoyl 3-(3-methyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 70%

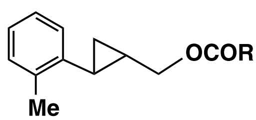
$[\alpha]_D^{23} = +37.8$ (*c* 0.98, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{16}N_2O_6$

3,5-Dinitrobenzoyl 3-(2-methyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 78%

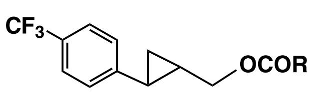
$[\alpha]_D^{24} = +13.1$ (*c* 0.99, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{13}F_3N_2O_6$

3,5-Dinitrobenzoyl 3-(4-trifluoromethyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 84%

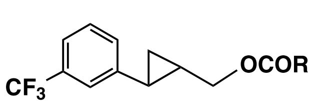
$[\alpha]_D^{23} = +39.5$ (*c* 0.97, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto,
Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{13}F_3N_2O_6$

3,5-Dinitrobenzoyl 3-(3-trifluoromethyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 78%

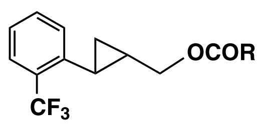
$[\alpha]_D^{21} = +32.0$ (*c* 1.01, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{18}H_{13}F_3N_2O_6$

3,5-Dinitrobenzoyl 3-(2-trifluoromethyl)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 86%

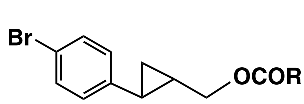
$[\alpha]_D^{21}$ = +16.0 (*c* 1.08, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{17}H_{13}BrN_2O_6$

3,5-Dinitrobenzoyl 3-(4-bromo)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 80%

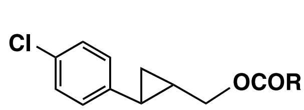
$[\alpha]_D^{19}$ = +37.4 (*c* 1.07, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Nobuyuki Imai,* Tetsuro Nomura, Shinya Yamamoto, Yoshihiro Ninomiya and Junzo Nokami

Tetrahedron: Asymmetry *13 (2002) 2433*



$C_{17}H_{13}ClN_2O_6$

3,5-Dinitrobenzoyl 3-(4-chloro)phenyl-2,3-methano-1-propanate (R = 3,5-dinitrobenzene)

Ee = 82%

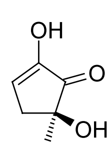
$[\alpha]_D^{19}$ = +38.0 (*c* 1.21, $CHCl_3$)

Source of chirality: catalytic enantioselective cyclopropanation

Absolute configuration: unknown

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_6H_8O_3$

(*S*)-2,5-Dihydroxy-5-methylcyclopent-2-en-1-one

Ee = 94%

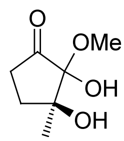
$[\alpha]_D^{18}$ = −49 (*c* 0.71, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: 5*S*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_7H_{12}O_4$

(*S*)-2,3-Dihydroxy-2-methoxy-3-methylcyclopentanone

Ee = 94%

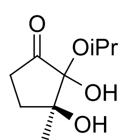
$[\alpha]_D^{18} = +35$ (c 1.12, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_9H_{16}O_4$

(*S*)-2,3-Dihydroxy-2-isopropoxy-3-methylcyclopentanone

Ee = 95%

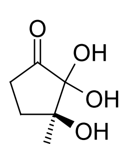
$[\alpha]_D^{21} = +75$ (c 1.22, *i*PrOH)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_6H_{10}O_4$

(*S*)-3-Methyl-2,2,3-trihydroxycyclopentanone

Ee = 95%

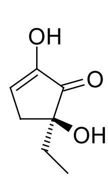
$[\alpha]_D^{22} = +40$ (c 0.92, acetone)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*S*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_7H_{10}O_3$

(*S*)-5-Ethyl-2,5-dihydroxycyclopent-2-en-1-one

Ee >95%

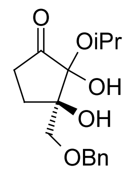
$[\alpha]_D^{18} = -146$ (c 0.73, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: 5*S*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_{17}H_{24}O_5$

(*R*)-3-[(2-Benzyloxyethyl)]-2,3-dihydroxy-2-isopropoxycyclopentanone

Ee >98%

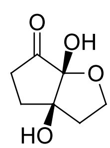
$[\alpha]_D^{20}$ = +38 (*c* 1.05, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: 3*R*

Anne Paju, Tõnis Kanger, Tõnis Pehk, Aleksander-Mati Müürisepp and Margus Lopp*

Tetrahedron: Asymmetry *13 (2002) 2439*



$C_7H_{10}O_4$

(1*R*,5*R*)-Dihydroxy-2-oxabicyclo[3.3.0]octane-8-one

Ee >95%

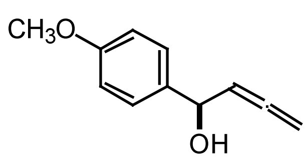
$[\alpha]_D^{20}$ = −26 (*c* 1.17, acetone)

Source of chirality: asymmetric synthesis

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

Makoto Nakajima,* Makoto Saito and Shunichi Hashimoto

Tetrahedron: Asymmetry *13 (2002) 2449*



$C_{10}H_{12}O_2$

1-Phenyl-2,3-butadien-1-ol

E.e. = 62%

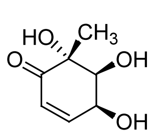
$[\alpha]_D^{21}$ −41.0 (*c* 1 $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: *R*

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,* Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_7H_{10}O_4$

(2*R*,3*S*,4*S*)-2-Methyl-2,3,4-trihydroxy-5-cyclohexen-1-one

$[\alpha]_D^{25}$ = +175.4 (*c* 0.7, MeOH)

Source of chirality: stereoselective enzymatic dihydroxylation

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

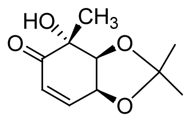
Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*

$[\alpha]_D^{25}$ = +110.8 (*c* 0.11, $CHCl_3$)

Source of chirality: stereoselective enzymatic dihydroxylation

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



$C_{10}H_{14}O_4$

(2*R*,3*S*,4*S*)-3,4-Isopropylidenedioxy-2-hydroxy-2-methyl-5-cyclohexen-1-one

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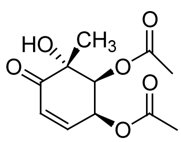
Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*

$[\alpha]_D^{25}$ = +123.7 (*c* 0.19, $CHCl_3$)

Source of chirality: stereoselective enzymatic dihydroxylation

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



$C_{11}H_{14}O_6$

(2*R*,3*S*,4*S*)-3,4-Diacetoxy-2-hydroxy-2-methyl-5-cyclohexen-1-one

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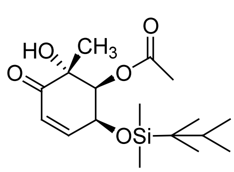
Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*

$[\alpha]_D^{25}$ = +80.7 (*c* 0.15, $CHCl_3$)

Source of chirality: stereoselective enzymatic dihydroxylation

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



$C_{17}H_{30}SiO_5$

(2*R*,3*S*,4*S*)-3-Acetoxy-4-(dimethylthexylsilyl)oxy-2-hydroxy-2-methyl-5-cyclohexen-1-one

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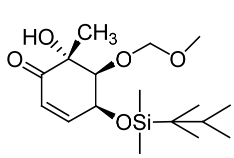
Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*

$[\alpha]_D^{25}$ = +108.8 (*c* 6.1, acetone)

Source of chirality: stereoselective enzymatic dihydroxylation

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

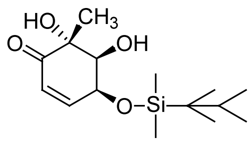


$C_{17}H_{32}SiO_5$

(2*R*,3*S*,4*S*)-4-(Dimethylthexylsilyl)oxy-3-*O*-methoxymethyl-2,3-dihydroxy-2-methyl-5-cyclohexen-1-one

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_{15}H_{28}SiO_4$

(2*R*,3*S*,4*S*)-2,3-Dihydroxy-4-(dimethylthexylsilyl)oxy-2-methyl-5-cyclohexen-1-one

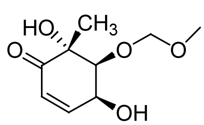
$[\alpha]_D^{25} = +106.6$ (*c* 0.43, acetone)

Source of chirality: stereoselective enzymatic dihydroxylation

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

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_9H_{14}O_5$

(2*R*,3*S*,4*S*)-2-Methyl-3-*O*-methoxymethyl-2,3,4-trihydroxy-5-cyclohexen-1-one

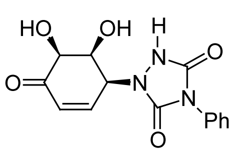
$[\alpha]_D^{25} = +63.7$ (*c* 6.0, acetone)

Source of chirality: stereoselective enzymatic dihydroxylation

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

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_{14}H_{13}N_3O_5$

1-((1*S*,5*S*,6*S*)-5,6-Dihydroxy-4-oxocyclohex-2-en-1-yl)-4-phenyl-1,2,4-triazolidine-3,5-dione

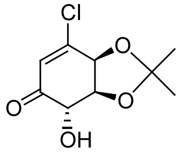
$[\alpha]_D^{20} = -37.0$ (*c* 0.54, MeOH)

Source of chirality: stereoselective enzymatic dihydroxylation

Absolute configuration: 1*S*,5*S*,6*S*

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_9H_{11}ClO_4$

(4*S*,5*S*,6*S*)-3-Chloro-4,5-isopropylidenedioxy-6-hydroxycyclohex-2-en-1-one

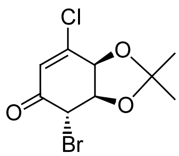
$[\alpha]_D^{25} = -33.1$ (*c* 0.16, acetone)

Source of chirality: stereoselective enzymatic dihydroxylation

Absolute configuration: 4*S*,5*S*,6*S*

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_9H_{10}BrClO_3$

(4*S*,5*S*,6*S*)-6-Bromo-3-chloro-4,5-isopropylidenedioxycyclohex-2-en-1-one

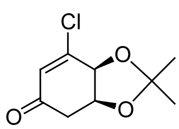
$[\alpha]_D^{20} = -69.3$ (*c* 0.15, CH_2Cl_2)

Source of chirality: stereoselective enzymatic dihydroxylation

Absolute configuration: 4*S*,5*S*,6*S*

Valeria Schapiro, Gabriel Cavalli, Gustavo A. Seoane,*
Ricardo Faccio and Alvaro W. Mombrú

Tetrahedron: Asymmetry *13 (2002) 2453*



$C_9H_{11}ClO_3$

(4*S*,5*S*)-3-Chloro-4,5-isopropylidenedioxycyclohex-2-en-1-one

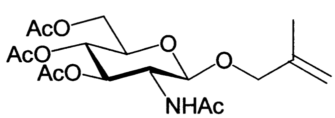
$[\alpha]_D^{20} = -33.1$ (*c* 0.16, CH_2Cl_2)

Source of chirality: stereoselective enzymatic dihydroxylation

Absolute configuration: 4*S*,5*S*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and
Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{18}H_{27}NO_9$

2-Methyl-2-propenyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

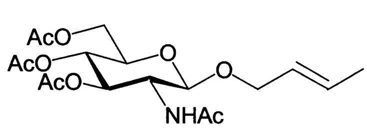
$[\alpha]_D^{25} = +36.9$ (*c* 0.6, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and
Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{18}H_{27}NO_9$

trans-2-Butenyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

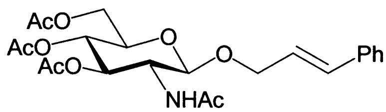
$[\alpha]_D^{25} = -28.3$ (*c* 0.8, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{23}H_{29}NO_9$

trans-3-Phenyl-2-propenyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

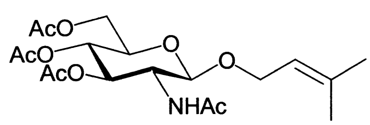
$[\alpha]_D^{25} = -24.0$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{29}NO_9$

3-Methyl-2-butenyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

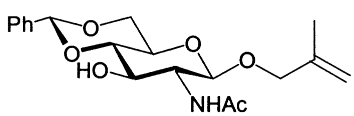
$[\alpha]_D^{25} = +50.0$ (*c* 0.6, $CHCl_3$)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_6$

2-Methyl-2-propenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

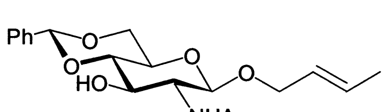
$[\alpha]_D^{25} = -50.0$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_6$

trans-2-Butenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

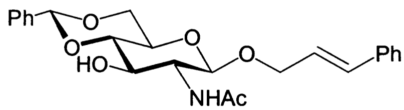
$[\alpha]_D^{25} = -57.7$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{24}H_{27}NO_6$

trans-3-Phenyl-2-propenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -90.0$ (*c* 1.2, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

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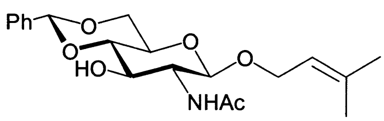
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{20}H_{27}NO_6$

3-Methyl-2-butenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

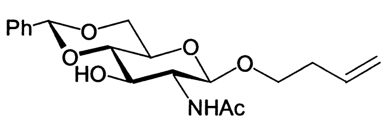
$[\alpha]_D^{25} = -34.6$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_6$

3-Butenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

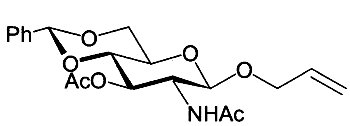
$[\alpha]_D^{25} = -44.4$ (*c* 0.9, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{20}H_{25}NO_7$

Allyl 2-acetamido-3-*O*-acetyl-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

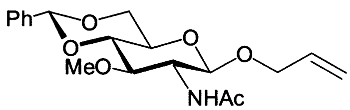
$[\alpha]_D^{25} = -77.1$ (*c* 0.7, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_6$

Allyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-methyl-β-D-glucopyranoside

E.e. = 100%

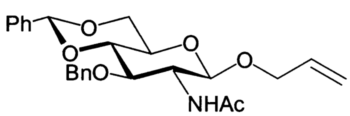
$[\alpha]_D^{25} = -103.4$ (*c* 0.7, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{25}H_{29}NO_6$

Allyl 2-acetamido-3-*O*-benzyl-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

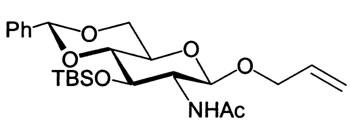
$[\alpha]_D^{25} = -37.6$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{24}H_{37}NO_6Si$

Allyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-*tert*-butyldimethylsilyl-β-D-glucopyranoside

E.e. = 100%

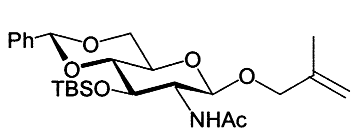
$[\alpha]_D^{25} = -66.3$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{25}H_{39}NO_6Si$

2-Methyl-2-propenyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-*tert*-butyldimethylsilyl-β-D-glucopyranoside

E.e. = 100%

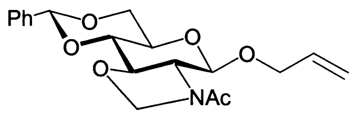
$[\alpha]_D^{25} = -30.4$ (*c* 0.9, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{23}NO_6$

Allyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-2-*N*-3-*O*-methylidene-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -21.5$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*

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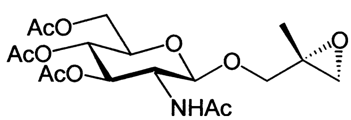
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{18}H_{27}NO_{10}$

(*R*)-2,3-Epoxy-2-methylpropyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

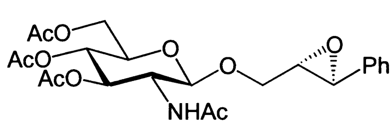
$[\alpha]_D^{25} = +16.6$ (*c* 0.8, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*, (*R*)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{23}H_{29}NO_{10}$

(2*S*,3*S*)-2,3-Epoxy-3-phenylpropyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

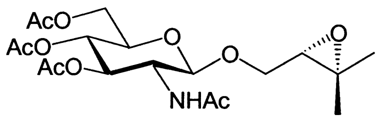
$[\alpha]_D^{25} = -32.0$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*, (2*S*,3*S*)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{29}NO_{10}$

(*S*)-2,3-Epoxy-3-methylbutyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

E.e. = 100%

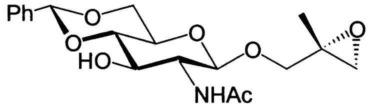
$[\alpha]_D^{25} = +13.9$ (*c* 0.9, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*, (*S*)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_7$

(*R*)-2,3-Epoxy-2-methylpropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

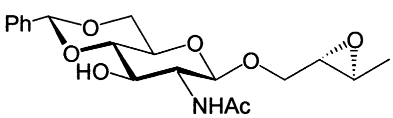
$[\alpha]_D^{25} = -69.1$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_7$

(2*S*,3*S*)-2,3-Epoxybutyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -76.7$ (*c* 0.7, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (2S,3S)-2,3-epoxy-

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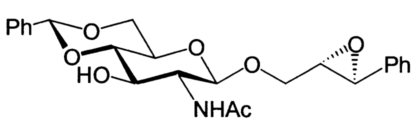
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{24}H_{27}NO_7$

(2*S*,3*S*)-2,3-Epoxy-3-phenylpropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

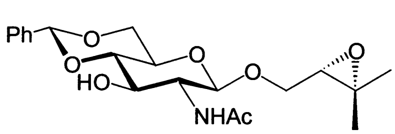
$[\alpha]_D^{25} = -88.3$ (*c* 1.2, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (2S,3S)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{20}H_{27}NO_7$

(*S*)-2,3-Epoxy-3-methylbutyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -64.9$ (*c* 1.0, DMF)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (S)-2,3-epoxy-

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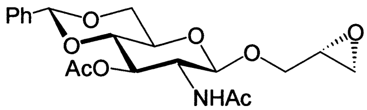
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{20}H_{25}NO_8$

(*R*)-2,3-Epoxypropyl 2-acetamido-3-*O*-acetyl-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -64.0$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

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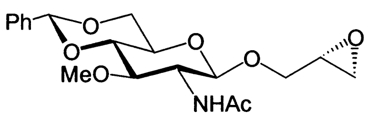
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{25}NO_7$

(*R*)-2,3-Epoxypropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-methyl-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = +102.2$ (*c* 0.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

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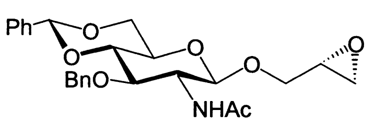
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{25}H_{29}NO_7$

(*R*)-2,3-Epoxypropyl 2-acetamido-3-*O*-benzyl-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

E.e. = 100%

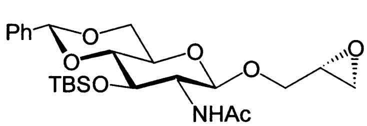
$[\alpha]_D^{25} = -54.0$ (*c* 1.0, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

José M. Vega-Pérez,* José I. Candela, Eugenia Blanco and Fernando Iglesias-Guerra*

Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{24}H_{37}NO_7Si$

(*R*)-2,3-Epoxypropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-*tert*-butyldimethylsilyl-β-D-glucopyranoside

E.e. = 100%

$[\alpha]_D^{25} = -66.0$ (*c* 0.5, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

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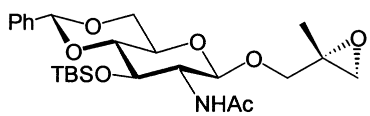
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{25}H_{39}NO_7Si$

E.e. = 100%

$[\alpha]_D^{25} = -42.5$ (*c* 0.8, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

(*R*)-2,3-Epoxy-2-metylpropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-3-*O*-*tert*-butyldimethylsilyl-β-D-glucopyranoside

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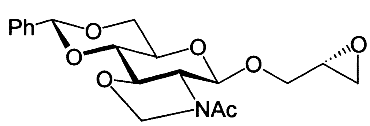
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{19}H_{23}NO_7$

E.e. = 23%

$[\alpha]_D^{25} = +82.8$ (*c* 1.1, CH_2Cl_2)

Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2,3-epoxy-

(*R*)-2,3-Epoxypropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-2-*N*-3-*O*-methylidene-β-D-glucopyranoside

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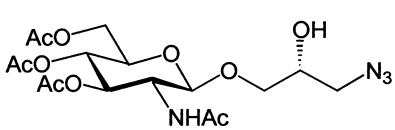
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{17}H_{26}N_4O_{10}$

E.e. = 74%

$[\alpha]_D^{25} = +55.6$ (*c* 0.9, AcOEt)

Source of chirality: asymmetric synthesis

Absolute configuration: β-D-*gluco*, (*R*)-2-hydroxy

(*R*)-3-Azido-2-hydroxypropyl 2-acetamido-3,4,6-tri-*O*-acetyl-2-deoxy-β-D-glucopyranoside

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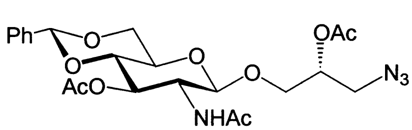
Tetrahedron: Asymmetry *13 (2002) 2471*



$C_{22}H_{28}N_4O_9$

E.e. = 100%

$[\alpha]_D^{25} = -64.9$ (*c* 1.0, CH_2Cl_2)

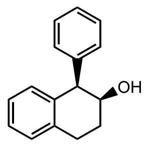
Source of chirality: asymmetric synthesis

Absolute configuration: (*R*)-4,6-*O*-, β-D-*gluco*, (*R*)-2-acetoxy-

(*R*)-2-Acetoxy-3-azidopropyl 2-acetamido-(*R*)-4,6-*O*-benzylidene-2-deoxy-β-D-glucopyranoside

Nathaniel J. Alcock, Inderjit Mann, Philip Peach and Martin Wills*

Tetrahedron: Asymmetry *13 (2002) 2485*



$C_{16}H_{16}O$

(1*R*,2*S*)-1-Phenyl-2-hydroxy-1,2,3,4-tetrahydronaphthalene

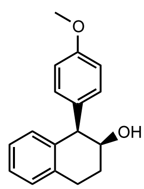
$[\alpha]_D^{20} = -91.75$ (*c* 2.06, $CHCl_3$)

Source of chirality: enantioselective transfer hydrogenation

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

Nathaniel J. Alcock, Inderjit Mann, Philip Peach and Martin Wills*

Tetrahedron: Asymmetry *13 (2002) 2485*



$C_{17}H_{18}O_2$

(1*R*,2*S*)-1-(*p*-Methoxyphenyl)-2-hydroxy-1,2,3,4-tetrahydronaphthalene

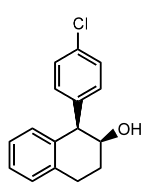
$[\alpha]_D^{20} = -96.1$ (*c* 3.90, EtOH)

Source of chirality: enantioselective transfer hydrogenation

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

Nathaniel J. Alcock, Inderjit Mann, Philip Peach and Martin Wills*

Tetrahedron: Asymmetry *13 (2002) 2485*



$C_{16}H_{15}ClO$

(1*R*,2*S*)-1-(*p*-Chlorophenyl)-2-hydroxy-1,2,3,4-tetrahydronaphthalene

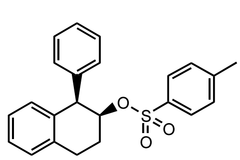
$[\alpha]_D^{20} = -124.7$ (*c* 1.65, EtOH)

Source of chirality: enantioselective transfer hydrogenation

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

Nathaniel J. Alcock, Inderjit Mann, Philip Peach and Martin Wills*

Tetrahedron: Asymmetry *13 (2002) 2485*



$C_{23}H_{22}O_3$

(1*R*,2*S*)-1-Phenyl-2-hydroxy-1,2,3,4-tetrahydronaphthalene *p*-toluenesulphonyl ester

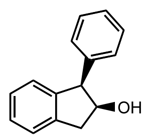
$[\alpha]_D^{20} = -80.4$ (*c* 1.03, $CHCl_3$)

Source of chirality: enantioselective transfer hydrogenation

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

Nathaniel J. Alcock, Inderjit Mann, Philip Peach and Martin Wills*

Tetrahedron: Asymmetry *13 (2002) 2485*



$C_{15}H_{14}O$

(1*R*,2*S*)-1-Phenylindan-2-ol

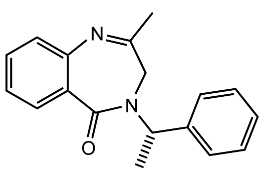
$[\alpha]_D^{20} = -49.7$ (*c* 0.91, $CHCl_3$)

Source of chirality: enantioselective transfer hydrogenation

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

Giorgio Molteni,* Gianluigi Broggini and Tullio Pilati

Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{18}H_{18}N_2O$

2-Methyl-4-[(*S*)-1-phenylethyl]-1,4-benzodiazepin-5(3*H*)-one

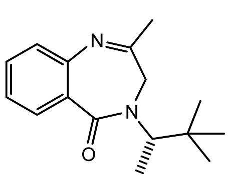
$[\alpha]_D^{25} = -475$ (*c* 0.5, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

Absolute configuration: *S*

Giorgio Molteni,* Gianluigi Broggini and Tullio Pilati

Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{16}H_{22}N_2O$

2-Methyl-4-[(2*S*)-2,3,3-trimethyl-2-butyl]-1,4-benzodiazepin-5(3*H*)-one

$[\alpha]_D^{25} = -730$ (*c* 0.5, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

Absolute configuration: *S*

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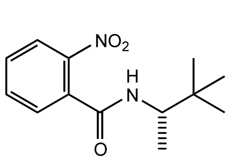
Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{13}H_{18}N_2O_3$

N-[(2*S*)-3,3-Dimethyl-2-butyl]-2-nitrobenzamide

$[\alpha]_D^{25} = +3.3$ (*c* 0.55, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane

Absolute configuration: 2*S*

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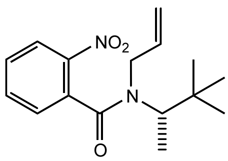
Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{16}H_{22}N_2O_3$

N-Prop-2-enyl-*N*-[(2*S*)-3,3-dimethyl-2-butyl]-2-nitrobenzamide

$[\alpha]_D^{25}=+27$ (*c* 1.60, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane

Absolute configuration: 2*S*

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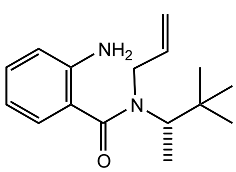
Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{16}H_{24}N_2O$

N-Prop-2-enyl-*N*-[(2*S*)-3,3-dimethyl-2-butyl]-2-amino benzamide

$[\alpha]_D^{25}=+56.3$ (*c* 0.78, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane

Absolute configuration: 2*S*

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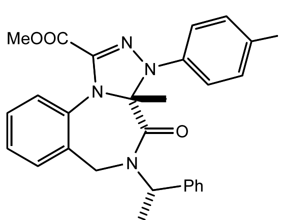
Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{28}H_{28}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*R*)-methyl-5-[(*S*)-1-phenylethyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*][1,4]-benzodiazepine-4-one

$[\alpha]_D^{25}=+79$ (*c* 0.06, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

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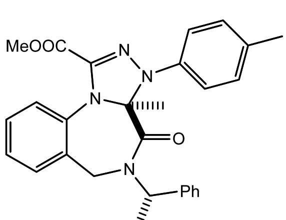
Tetrahedron: Asymmetry *13 (2002) 2491*



$C_{28}H_{28}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*S*)-methyl-5-[(*S*)-1-phenylethyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*][1,4]-benzodiazepine-4-one

$[\alpha]_D^{25}=+7$ (*c* 0.53, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

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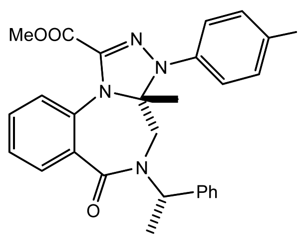
Tetrahedron: Asymmetry *13 (2002) 2491*



$[\alpha]_D^{25} = -6.3$ (c 0.25, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

$C_{28}H_{28}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*R*)-methyl-5-[(*S*)-1-phenylethyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*][1,4]-benzodiazepine-6-one

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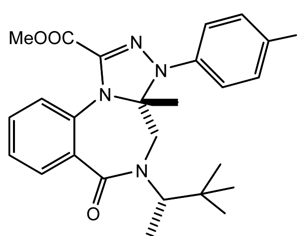
Tetrahedron: Asymmetry *13 (2002) 2491*



$[\alpha]_D^{25} = +125.5$ (c 0.50, $CHCl_3$)

Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

$C_{26}H_{32}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*R*)-methyl-5-[2-(*S*)-3,3-dimethylbutyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*][1,4]-benzodiazepine-6-one

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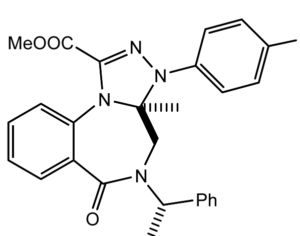
Tetrahedron: Asymmetry *13 (2002) 2491*



$[\alpha]_D^{25} = +78$ (c 0.45, $CHCl_3$)

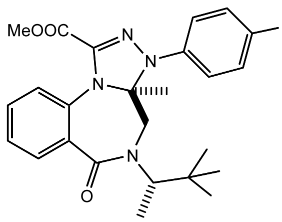
Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

$C_{28}H_{28}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*S*)-methyl-5-[(*S*)-1-phenylethyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*]-benzodiazepine-6-one

Giorgio Molteni,* Gianluigi Broggini and Tullio Pilati

Tetrahedron: Asymmetry *13 (2002) 2491*



$[\alpha]_D^{25} = -18.6$ (c 0.25, $CHCl_3$)

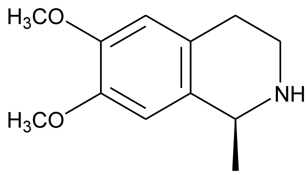
Source of chirality: (2*S*)-3,3-dimethylaminobutane and stereoselective synthesis

$C_{26}H_{32}N_4O_3$

1-Methoxycarbonyl-3-(4-methylphenyl)-3a-(*S*)-methyl-5-[2-(*S*)-3,3-dimethylbutyl]-3,3a,4,4,6,6-hexahydro-[1,2,4]triazolo[4,3-*a*][1,4]-benzodiazepine-6-one

Maria Chrzanowska*

Tetrahedron: Asymmetry *13 (2002) 2497*



$C_{12}H_{17}NO_2$

(*R*)-Salsolidine

E.e. = 33%

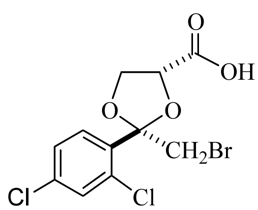
$[\alpha]_D$ = +17.7 (*c* 1.30, EtOH)

Source of chirality: stereoselective addition

Absolute configuration: *R*

Young Hee Kim, Chan Seong Cheong,* So Ha Lee, Sook Jin Jun, Kwan Soo Kim and Hyun-Sung Cho

Tetrahedron: Asymmetry *13 (2002) 2501*



$C_{11}H_9BrC_{12}O_4$

(+)-*cis*-2-Bromomethyl-2-(2,4-dichlorophenyl)-1,3-dioxolan-4-carboxylic acid

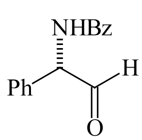
$[\alpha]_D^{26}$ = +28 (*c* 1, MeOH)

Source of chirality: CAL-B catalyzed kinetic resolution

Absolute configuration: 2*R*,4*R*

Andrzej E. Wróblewski* and Dorota G. Piotrowska

Tetrahedron: Asymmetry *13 (2002) 2509*



$C_{15}H_{13}NO_2$

N-(2-*oxo*-1-Phenylethyl)benzamide; *N*-benzoylphenylglycinal

E.e. = 100%

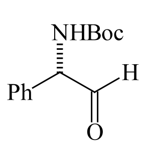
$[\alpha]_D^{20}$ = +269 (*c* 0.8, CH_2Cl_2) = +260 (*c* 0.85, $CHCl_3$)

Source of chirality: L-phenylglycine

Absolute configuration: *S*

Andrzej E. Wróblewski* and Dorota G. Piotrowska

Tetrahedron: Asymmetry *13 (2002) 2509*



$C_{13}H_{17}NO_3$

Dimethylethyl (2-*oxo*-1-phenylethyl)carbamate; *N*-Boc-phenylglycinal

E.e. = 100%

$[\alpha]_D^{20}$ = +272 (*c* 0.9, CH_2Cl_2) = +308 (*c* 0.75, $CHCl_3$)

Source of chirality: L-phenylglycine

Absolute configuration: *S*