## Stereochemistry abstracts

Narciso M. Garrido,\* David Díez, Sara H. Domínguez, Mercedes García, M. Rosa Sánchez and Stephen G. Davies

Tetrahedron: Asymmetry 17 (2006) 2183

Ph COOR

COOR

R= CH(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -2.5 (c 1.4, CHCl_3)$ 

Source of chirality: asymmetric synthesis Absolute configuration:  $1S,2S,6S,\alpha S$ 

C<sub>28</sub>H<sub>45</sub>O<sub>4</sub>N

Pent-3-yl (1S,2S,6S,αS)-2-(N-methyl-N-α-methylbenzylamino)-6-(pent-3-yloxycarbonylmethyl)-cyclohexanecarboxylate

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Tetrahedron: Asymmetry 17 (2006) 2183

Ph N Me COOR COOH R= CH(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub> C<sub>23</sub>H<sub>35</sub>O<sub>4</sub>N

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -2.8$  (c 2.0, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis Absolute configuration:  $1S,2S,3S,\alpha S$ 

(1S,2S,3S,αS)-2-[(2-Pent-3-yloxycarbonyl-3-N-methyl-N-α-methylbenzylamino) cyclohexylacetic acid

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Tetrahedron: Asymmetry 17 (2006) 2183

NO<sub>2</sub> ...COOMe

C11H17O6N

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = +2.9 (c 0.8, CHCl_3)$ 

Source of chirality: asymmetric synthesis Absolute configuration: 1R,2R,6R

Methyl (1*R*,2*R*,6*R*)-6-methoxycarbonylmethyl-2-nitrocyclohexanecarboxylate

Narciso M. Garrido,\* David Díez, Sara H. Domínguez, Mercedes García, M. Rosa Sánchez and Stephen G. Davies

Tetrahedron: Asymmetry 17 (2006) 2183

Ph COOR

COOR

R= CH(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -6.2 (c \ 0.7, \text{CHCl}_3)$ 

Source of chirality: asymmetric synthesis Absolute configuration:  $1S,2S,6S,\alpha S$ 

 $C_{22}H_{35}O_2N$ 

Pent-3-yl  $(1S,2S,6S,\alpha S)$ -6-methyl-2-(N-methyl-N- $\alpha$ -methylbenzylamino) cyclohexanecarboxylate

Narciso M. Garrido,\* David Díez, Sara H. Domínguez, Mercedes García, M. Rosa Sánchez and Stephen G. Davies

Tetrahedron: Asymmetry 17 (2006) 2183

Ee: >95% (NMR)  $[\alpha]_{D}^{20} = +18.1 \ (c \ 0.6, \text{CHCl}_3)$ 

Source of chirality: asymmetric synthesis

Absolute configuration: S

C<sub>19</sub>H<sub>32</sub>O<sub>4</sub>

Pent-3-yl (S)-6-pent-3-yloxycarbonylmethyl cyclohex-1-enecarboxylate

Narciso M. Garrido,\* David Díez, Sara H. Domínguez, Mercedes García, Tetrahedron: Asymmetry 17 (2006) 2183 M. Rosa Sánchez and Stephen G. Davies

COOR \_COOH  $R = CH(CH_2CH_3)_2$ 

Ee: >95% (NMR)  $[\alpha]_{D}^{20} = +23.9 \ (c \ 1.2, CHCl_3)$ 

Source of chirality: asymmetric synthesis

Absolute configuration: S

 $C_{14}H_{22}O_4$ 

(S)-2-(2-Pent-3-yloxycarbonyl cyclohex-2-enyl)acetic acid

Narciso M. Garrido,\* David Díez, Sara H. Domínguez, Mercedes García, Tetrahedron: Asymmetry 17 (2006) 2183 M. Rosa Sánchez and Stephen G. Davies

COOR  $R = CH(CH_2CH_3)_2$ 

Ee: >95% (NMR)  $[\alpha]_{D}^{20} = +46.0 \ (c \ 0.5, \text{CHCl}_3)$ 

Source of chirality: asymmetric synthesis

Absolute configuration: R

C<sub>13</sub>H<sub>22</sub>O<sub>2</sub>

Pent-3-yl (R)-6-methyl-cyclohex-1-ene carboxylate

Denis A. Lenev,\* Denis G. Golovanov, Konstantin A. Lyssenko and Remir G. Kostyanovsky

Tetrahedron: Asymmetry 17 (2006) 2191

 $[\alpha](\lambda, \text{ nm}, c 2, \text{CH}_2\text{Cl}_2) = -41 (578); -47 (546); -100$ (436); -113(406)

Absolute configuration was determined by X-ray diffraction analysis

(5R,11R)-(+)-2,5,8-Trimethyl-6H,12H-5,11-(1,2-ethano)dibenzo[b,f][1,5]diazocinium iodide

Denis A. Lenev,\* Denis G. Golovanov, Konstantin A. Lyssenko and Remir G. Kostyanovsky

Tetrahedron: Asymmetry 17 (2006) 2191

[ $\alpha$ ] ( $\lambda$ , nm, c 2, H<sub>2</sub>O) = -2 (578); -3 (546); -8 (436); -10 (406)

Absolute configuration was determined by chemical correlation

(5R,11R)-(+)-2,5,8,11-Tetramethyl-6H,12H-5,11-(1,2-ethano)dibenzo[b,f][1,5]diazocinium methylsulfate

Tetsuo Tauchi, Hiroki Sakuma, Takahiro Ohno, Nobuyuki Mase, Hidemi Yoda and Kunihiko Takabe\*

Tetrahedron: Asymmetry 17 (2006) 2195

Ee = 94%  $[\alpha]_D^{26} = -25.8 \ (c \ 0.05, \text{ CHCl}_3)$ 

 $C_{14}H_{18}O_4$ 

(S)-4-Hydroxy-3,5-dimethyl-5-((4E,6E)-3-oxoocta-4,6-dienyl)furan-2(5H)-one

Nitin W. Fadnavis, Su-Hyun Seo, Joo-Hyun Seo and Byung-Gee Kim\*

Tetrahedron: Asymmetry 17 (2006) 2199

 $C_{10}H_{11}NO_2\\$ 

(3E,2S)-2-Amino-4-phenyl-3-butenoic acid

Ee >99%

 $[\alpha]_{D}^{25} = +38.4 (c 1, 0.1 \text{ N HCl})$ 

Source of chirality: enzymatic asymmetric transamination

Absolute configuration: (S)

Nitin W. Fadnavis, Su-Hyun Seo, Joo-Hyun Seo and Byung-Gee Kim\*

Tetrahedron: Asymmetry 17 (2006) 2199

O NH<sub>2</sub>
COOH

 $C_{10}H_{11}NO_3$ 

(2S)-2-Amino-4-oxo-4-phenylbutyric acid

Ee >99%

 $[\alpha]_{D}^{25} = +40.5 \ (c \ 0.1, 6 \ M \ HCl)$ 

Source of chirality: enzymatic asymmetric transamination

Absolute configuration: (S)

Xiao-Xin Shi,\* Feng Ni, Hai-Xia Shang, Ming-Le Yan and Jun-Quan Su

Tetrahedron: Asymmetry 17 (2006) 2210

(R)-(-)-Apomorphine hydrochloride

 $[\alpha]_{\rm D}^{20} = -48.1 \ (c \ 1.0, \text{ water})$ 

Source of chirality: (-)-tartaric acid

Absolute configuration: (R)

Xiao-Xin Shi,\* Feng Ni, Hai-Xia Shang, Ming-Le Yan and Jun-Quan Su

Tetrahedron: Asymmetry 17 (2006) 2210

$$AcO$$
 $C_{21}H_{21}NO_4$ 

(R)-(-)-10,11-Diaetoxyaporphine

 $[\alpha]_D^{20} = -137.1$  (c 0.3, methanol) Source of chirality: (–)-tartaric acid

Absolute configuration: (*R*)

Xiao-Xin Shi,\* Feng Ni, Hai-Xia Shang, Ming-Le Yan and Jun-Quan Su

Tetrahedron: Asymmetry 17 (2006) 2210

$$N$$
 $H$ 
 $C_{17}H_{17}N$ 

(R)-(-)-Aporphine

 $[\alpha]_{\rm D}^{20} = -151.6$  (c 0.6, methanol) Source of chirality: (-)-tartaric acid Absolute configuration: (R)

Xiao-Xin Shi,\* Feng Ni, Hai-Xia Shang, Ming-Le Yan and Jun-Quan Su

Tetrahedron: Asymmetry 17 (2006) 2210

 $C_{17}H_{18}NCl$ 

(R)-(-)-Aporphine hydrochloride

 $[\alpha]_D^{20} = -106.6$  (c 0.3, methanol) Source of chirality: (-)-tartaric acid

Absolute configuration: (R)

Xiao-Xin Shi,\* Feng Ni, Hai-Xia Shang, Ming-Le Yan and Jun-Quan Su

Tetrahedron: Asymmetry 17 (2006) 2210

(R)-(-)-10,11-Dimethoxyaporphine

 $[\alpha]_{\rm D}^{20} = -172.3 \ (c \ 1.4, \text{ methanol})$ Source of chirality: (-)-tartaric acid Absolute configuration: (R)

Sosale Chandrasekhar\* and Suresh Kumar Gorla

Tetrahedron: Asymmetry 17 (2006) 2247

(Ar = 4-methylphenyl)

Ee >95%  $[\alpha]_{D}^{25} = +59.8 \ (c \ 1.9, \text{CHCl}_3)$ Source of chirality: resolution (triage)

Ee >95%

 $[\alpha]_{D}^{25} = -57.5 \ (c \ 1.9, \text{CHCl}_3)$ 

Source of chirality: resolution (triage) Absolute configuration: (10-11)Z,2R,6S

Absolute configuration: (10-11)E,2R,6S

 $((10-11)E, 2R, 6S)-10-((4-Methylphenyl)methylene)-4-azatricyclo(5.2.1.0^{2.6})-dec-8-ene-3,5-dione$ 

Sosale Chandrasekhar\* and Suresh Kumar Gorla

Tetrahedron: Asymmetry 17 (2006) 2247

(Ar = 4-methylphenyl)

 $((10-11)Z,2R,6S)-10-((4-Methylphenyl)methylene)-4-azatricyclo(5.2.1.0^{2,6})-dec-8-ene-3,5-dione$ 

Sosale Chandrasekhar\* and Suresh Kumar Gorla

Tetrahedron: Asymmetry 17 (2006) 2247

(Ar = 4-methylphenyl)

 $[\alpha]_{D}^{25} = +136.9 \ (c \ 1.3, \text{ CHCl}_3)$ Source of chirality: resolution (triage) Absolute configuration: (10-11)E,2R,6S

 $((10-11)E, 2R, 6S)-4-(p-Toluenesulfonyl)-10-((4-methylphenyl)methylene)-4-azatricyclo(5.2.1.0^{2.6})-dec-8-ene-3,5-dione$ 

Sosale Chandrasekhar\* and Suresh Kumar Gorla

Tetrahedron: Asymmetry 17 (2006) 2247

Ee >95%

 $[\alpha]_{D}^{25} = -120.0 \ (c \ 2.0, \text{ CHCl}_3)$ 

Source of chirality: resolution (triage) Absolute configuration: (10-11)Z,2R,6S

(Ar = 4-methylphenyl)

 $((10-11)Z,2R,6S)-4-(p-Toluenesulfonyl)-10-((4-methylphenyl)methylene)-4-azatricyclo(5.2.1.0^{2.6})-dec-8-ene-3,5-dione$ 

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

OH Te

C<sub>9</sub>H<sub>12</sub>OTe

(S)-1-(Phenyltellanyl)-2-propanol

 $Ee\!>\!\!99\%$ 

Ee > 99%

 $[\alpha]_{D}^{28} = +5 \ (c \ 1.0, \text{CH}_{2}\text{Cl}_{2})$ 

Absolute configuration: S

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

 $[\alpha]_D^{23} = +33$  (c 1.0, CH<sub>2</sub>Cl<sub>2</sub>) Absolute configuration: S

Te

 $C_7H_{16}OTe$ 

(S)-1-(n-Butyltellanyl)-2-propanol

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

Ee = 99%

 $[\alpha]_{D}^{22} = +7 (c 1.0, CH_{2}Cl_{2})$ Absolute configuration: S

 $C_8H_{18}OTe$ 

(S)-1-(n-Butyltellanyl)-3-butanol

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

Ee>99%

 $[\alpha]_{D}^{22} = -6 \ (c \ 1.0, \text{CH}_{2}\text{Cl}_{2})$ 

Absolute configuration: R

 $C_{11}H_{14}O_2Te$ 

(R)-O-Acetyl-1-(phenyltellanyl)-2-propanol

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

Ee = 98%

 $[\alpha]_{D}^{22} = +4 \ (c \ 1.0, CH_{2}Cl_{2})$ 

Absolute configuration: R

 $C_9H_{18}O_2Te$ 

(R)-O-Acetyl-1-(n-butyltellanyl)-2-propanol

Alcindo A. Dos Santos,\* Carlos E. Da Costa, Jefferson L. Princival and João V. Comasseto

Tetrahedron: Asymmetry 17 (2006) 2252

Ee = 98%

 $[\alpha]_{D}^{22} = +18 \ (c \ 1.0, \ CH_{2}Cl_{2})$ 

Absolute configuration: R

 $C_{10}H_{20}O_2Te$ 

(R)-O-Acetyl-1-(n-butyltellanyl)-3-butanol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

 $C_{21}H_{29}NO_4$ 

Ee, de: >95% (NMR)  $[\alpha]_{D}^{20} = +16.3 \ (c \ 0.90, \text{CHCl}_3)$ Source of chirality: asymmetric synthesis

Absolute configuration: 4R,4'S

Tetrahydropyranyl derivative of (R)-4-(benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-yn-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

BnHN OTHP
$$C_{21}H_{29}NO_4$$

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -59.0$  (c 1.25, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: 4*S*,4′*S* 

Tetrahydropyranyl derivative of (S)-4-(benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-yn-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

NHBn OTHF
$$C_{21}H_{31}NO_4$$

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = +6.4 (c 1.38, CHCl_3)$ 

Source of chirality: asymmetric synthesis

Absolute configuration: 4R,4'S

Tetrahydropyranyl derivative of (R,Z)-4-(benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-en-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

NHBn OTHP
$$C_{21}H_{31}NO_4$$

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -13.9$  (c 1.02, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: 4S,4'S

Tetrahydropyranyl derivative of (S,Z)-4-(benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-en-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

$$\begin{array}{c} \underset{\bullet}{\bigvee_{0}} \underset{\bullet}{\bigvee_{0}} \\ \underset{\bullet}{\bigvee_{0}} \\ C_{16}H_{23}NO_{3} \end{array}$$

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -99.2$  (c 1.27, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: 4R,4'S

(R,Z)-4-(Benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-en-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

NHBn OH  $C_{16}H_{23}NO_3$ 

Ee, de: >95% (NMR)  $[\alpha]_D^{20} = -0.7$  (c 0.67, CHCl<sub>3</sub>)

Source of chirality: asymmetric synthesis

Absolute configuration: 4S,4'S

(S,Z)-4-(Benzylamino)-4-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)but-2-en-1-ol

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

H ....O Bn C<sub>16</sub>H<sub>21</sub>NO<sub>2</sub>

Ee, de: >95% (NMR)

 $[\alpha]_{\rm D}^{20} = +138.4 \; (c \; 0.41, \; {\rm CHCl_3})$ 

Source of chirality: asymmetric synthesis

Absolute configuration: 2S,4'S

(S)-1-Benzyl-2,5-dihydro-2-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)-1*H*-pyrrole

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

N Bn C<sub>16</sub>H<sub>21</sub>NO<sub>2</sub> Ee, de: >95% (NMR)  $[\alpha]_{D}^{20} = -73.0 (c \ 0.63, \text{CHCl}_{3})$ 

Source of chirality: asymmetric synthesis

Absolute configuration: 2R,4'S

(R)-1-Benzyl-2,5-dihydro-2-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)-1*H*-pyrrole

David Díez,\* Ana B. Antón, Pilar García, Marta G. Nuñez, Narciso M. Garrido, Rosalina F. Moro, Isidro S. Marcos, Pilar Basabe and Julio G. Urones

Tetrahedron: Asymmetry 17 (2006) 2260

N Bn O

 $C_{16}H_{19}NO_{2}$ 

1-Benzyl-2-((S)-2',2'-dimethyl-1',3'-dioxolan-4'-yl)-1H-pyrrole

Ee, de: >95% (NMR)

 $[\alpha]_{D}^{20} = -20.7 \ (c \ 0.83, \text{ CHCl}_3)$ 

Source of chirality: asymmetric synthesis

Absolute configuration: 4'S

Francesco Ruffo,\* Raffaella Del Litto, Antonella De Roma, Alessandra D'Errico and Santo Magnolia

Tetrahedron: Asymmetry 17 (2006) 2265

 $[\alpha]_D = +23 \ (c \ 1.0, CH_2Cl_2)$ 

C58H50N2O2P2

Benzyl-4,6-O-benzylidene-2,3-deoxy-2,3-diamino-α-D-glucoside-N,N'-bis(2'-diphenylphoshinobenzoyl)

Francesco Ruffo,\* Raffaella Del Litto, Antonella De Roma, Alessandra D'Errico and Santo Magnolia

Tetrahedron: Asymmetry 17 (2006) 2265

 $[\alpha]_D = -29 \ (c \ 1.0, \ CH_2Cl_2)$ 

 $C_{52}H_{46}N_2O_6P_2$ 

Methyl-4,6-O-benzylidene-2,3-deoxy-2,3-diamino-α-D-mannoside-N,N'-bis(2'-diphenylphoshinobenzoyl)

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

 $[\alpha]_D = -44.6 \ (c \ 1, \ CH_2Cl_2)$ 

Source of chirality: (S)-2-amino-3,3-dimethyl-1-butanol

 $C_{13}H_{22}N_2O_2$ 

(4*S*)-4-tert-Butyl-2-[1-(4,5-dihydro-1,3-oxazol-2-yl)-1-methylethyl]-4,5-dihydro-1,3-oxazole

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

 $[\alpha]_D = +4.6 (c 1, EtOH)$ 

Source of chirality: (S)-2-amino-2-phenylpropan-1-ol

 $C_{16}H_{20}N_2O_2$ 

(4*S*)-2-[1-(4,5-Dihydro-1,3-oxazol-2-yl)-1-methylethyl]-4-methyl-4-phenyl-4,5-dihydro-1,3-oxazole

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

 $[\alpha]_D = -124.6 (c 1, CH_2Cl_2)$ 

Source of chirality: (S)-2-amino-2-phenylethanol

 $C_{15}H_{18}N_2O_2$ 

(4S)-2-[1-(4,5-Dihydro-1,3-oxazol-2-yl)-1-methylethyl]-4-phenyl-4,5-dihydro-1,3-oxazole

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>O<sub>2</sub>

 $[\alpha]_D = -206.3$  (c 1, EtOH)

Source of chirality: (1S,2R)-(-)-cis-1-amino-2-indanol

 $(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{Oxazol-2-yl})-1-\text{methylethyl}]-8,8a-\text{dihydro-3}aH-\text{indeno}[1,2-d][1,3]\\ \text{oxazole}(3aS,8aR)-2-[1-(4,5-\text{Dihydro-1},3-\text{Oxazol-2-yl})-1-\text{oxazol-2-yl})-1-\text{oxazol-2-yl})-1-\text{oxazol-2-yl}$ 

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

 $[\alpha]_D = -173.3 \ (c \ 1, CH_2Cl_2)$ 

Source of chirality: (S)-2-amino-3,3-dimethyl-1-butanol (S)-2-amino-2-phenylethanol

 $C_{19}H_{26}N_2O_2$ 

(4S)-4-tert-Butyl-2-{1-methyl-1-[(4S)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]ethyl}-4,5-dihydro-1,3-oxazole

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

 $[\alpha]_D = -86.9 (c \ 0.8, CH_2Cl_2)$ 

Source of chirality: (*S*)-2-amino-3,3-dimethyl-1-butanol (*S*)-2-aminopropan-1-ol

 $C_{14}H_{24}N_2O_2$ 

 $(4S) - 4 - tert - Butyl - 2 - \{1 - methyl - 1 - [(4S) - 4 - methyl - 4, 5 - dihydro - 1, 3 - oxazol - 2 - yl]ethyl\} - 4, 5 - dihydro - 1, 3 - oxazole$ 

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

(S)-2-amino-3-phenylpropan-1-ol

Source of chirality: (S)-2-amino-3,3-dimethyl-1-butanol

 $[\alpha]_D = -91.1 \ (c \ 1, CH_2Cl_2)$ 

 $[\alpha]_D = -96.9$  (c 1, CH<sub>2</sub>Cl<sub>2</sub>)

 $C_{20}H_{28}N_2O_2$ 

(4S)-4-Benzyl-2- $\{1-[(4S)$ -4-tert-Butyl-4,5-dihydro-1,3-oxazol-2-yl]-1-methylethyl $\}$ -4,5-dihydro-1,3-oxazole

José I. García,\* José A. Mayoral, Elisabet Pires\* and Isabel Villalba

Tetrahedron: Asymmetry 17 (2006) 2270

(R)-2-amino-3-(benzyloxy)propan-1-ol

Source of chirality: (S)-2-amino-3,3-dimethyl-1-butanol

 $C_{21}H_{30}N_2O_3$ 

(4S)-4-[(Benzyloxy)methyl]-2- $\{1$ -[(4S)-4-tert-Butyl-4,5-dihydro-1,3-oxazol-2-yl]-1-methylethyl $\}$ -4,5-dihydro-1,3-oxazole

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

2-Trifluoromethanesulfonyl-3,4-O-isopropylidene-L-fucono-1,5-lactone

 $[\alpha]_{\rm D}^{22} = -64.3 \ (c \ 1.11, \, \text{CHCl}_3)$ Source of chirality: L-fucose

 $[\alpha]_{D}^{22} = -33.8$  (c 1.95, CHCl<sub>3</sub>) Source of chirality: L-fucose

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Methyl 2,5-anhydro-6-deoxy-3,4-O-isopropylidene-L-talonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

 $\left[\alpha\right]_{\mathrm{D}}^{22} = -199 \; (c \; 1.60, \, \mathrm{CHCl_3})$ Source of chirality: L-fucose

 $C_{10}H_{15}BrO_5$ 

Methyl 2,5-anhydro-2-bromo-6-deoxy-3,4-*O*-isopropylidene-L-galactonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

N<sub>3</sub>,..., CH<sub>3</sub>

 $[\alpha]_D^{22} = -35.3$  (c 1.23, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{10}H_{15}N_3O_5$ 

Methyl 2,5-anhydro-2-azido-6-deoxy-3,4-O-isopropylidene-L-talonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

 $\left[\alpha\right]_{D}^{22} = -105.4 \ (c \ 0.74, \text{CHCl}_3)$ Source of chirality: L-fucose

 $C_9H_{14}O_5$ 

3,4-O-Isopropylidene-L-talono-1,5-lactone

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

TfO, ..., ..., ..., ..., ..., ..., ...

 $[\alpha]_D^{22} = -56.9$  (c 0.91, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{10}H_{13}F_3O_7S$ 

2-Trifluoromethanesulfonyl-3,4-O-isopropylidene-L-talono-1,5-lactone

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

 $[\alpha]_{D}^{22} = -53.9$  (c 1.21, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{10}H_{16}O_5$ 

Methyl 2,5-anhydro-6-deoxy-3,4-O-isopropylidene-L-galactonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

 $[\alpha]_{\rm D}^{23} = -27.7 \ (c \ 0.95, \, \text{CHCl}_3)$ Source of chirality: L-fucose

 $C_{10}H_{17}NO_5$ 

Methyl 2-amino-2,5-anhydro-6-deoxy-3,4-O-isopropylidene-L-galactonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

 $[\alpha]_{D}^{22} = -3.2$  (c 1.19, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{20}H_{26}N_2O_8$ 

Methyl N-2-(benzyloxycarbonylglycylamino)-2,5-anhydro-3,4-O-isopropylidene-6-deoxy-L-talonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\* Tetrahedron: Asymmetry 17 (2006) 2276

 $[\alpha]_{D}^{22} = -49 \ (c \ 0.42, \text{CHCl}_3)$ Source of chirality: L-fucose

C20H26N2O8

Methyl N-2-(benzyloxycarbonylglycylamino)-2,5-anhydro-3,4-O-isopropylidene-6-deoxy-L-galactonate

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

 $[\alpha]_D^{22} = -56.1$  (c 0.51, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{11}H_{16}N_2O_5$ 

(2S,3R,4R,5R)-3,4-O-Isopropylidene-2-methyl-6,9-diaza-1-oxaspiro-[4.5]-decane-7,10-dione

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

HN NH CH<sub>3</sub>

 $[\alpha]_D^{22} = -152.1$  (c 0.61, CH<sub>3</sub>OH) Source of chirality: L-fucose

 $C_{11}H_{16}N_2O_5$ 

(2S,3R,4R,5S)-3,4-O-Isopropylidene-2-methyl-6,9-diaza-1-oxaspiro-[4.5]-decane-7,10-dione

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

HN NH CH<sub>3</sub>

 $[\alpha]_D^{22} = -72.6$  (c 0.58, CHCl<sub>3</sub>) Source of chirality: L-fucose

 $C_{10}H_{14}N_2O_5$ 

(2S,3R,4R,5R)-3,4-O-Isopropylidene-2-methyl-6,8-diaza-1-oxaspiro-[4.4]-nonane-7,9-dione

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Tetrahedron: Asymmetry 17 (2006) 2276

HN NH O''CH3

 $[\alpha]_D^{22} = -1.1$  (c 0.43, CH<sub>3</sub>OH) Source of chirality: L-fucose

 $C_{10}H_{18}N_{2}O_{5} \\$ 

(2S,3R,4R,5R)-2-Methyl-6,9-diaza-1-oxaspiro-[4.5]-decane-7,10-dione

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

Tetrahedron: Asymmetry 17 (2006) 2276

 $C_{10}H_{18}N_2O_5$ 

NH O

 $[\alpha]_D^{22} = -0.3$  (c 0.41, CH<sub>3</sub>OH) Source of chirality: L-fucose

Yves Blériot,\* Michela I. Simone, Mark R. Wormald, Raymond A. Dwek, David J. Watkin and George W. J. Fleet\*

(2S,3R,4R,5S)-2-Methyl-6,9-diaza-1-oxaspiro-[4.5]-decane-7,10-dione

Tetrahedron: Asymmetry 17 (2006) 2276

 $C_7H_{10}N_2O_5$  (2S,3R,4R,5R)-2-Methyl-6,8-diaza-1-oxaspiro-[4.4]-nonane-7,9-dione

 $[\alpha]_D^{22} = -23.2$  (c 0.57, CH<sub>3</sub>OH) Source of chirality: L-fucose

Renato Bruni, Giancarlo Fantin, Silvia Maietti, Alessandro Medici, Paola Pedrini\* and Gianni Sacchetti

Tetrahedron: Asymmetry 17 (2006) 2287

OH OH

 $C_6H_{12}O$ 

5-Hexen-2-ol

Ee = 80% [by GLC analysis on a 25 m dimethyl n-pentyl-cyclodextrin in OV 1701] [ $\alpha$ ] $_{\rm D}^{25}$  = +10 (c 4.6, CHCl $_{\rm 3}$ ) Source of chirality: plant reduction

Absolute configuration: S

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Tetrahedron: Asymmetry 17 (2006) 2287

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 $$C_8H_{16}O$$  6-Methyl-5-hepten-2-ol

Ee = 90% [by GLC analysis on a 25 m dimethyl n-pentyl-cyclodextrin in OV 1701] [ $\alpha$ ] $_D^{25} = +13$  (c 1.3, EtOH) Source of chirality: plant reduction Absolute configuration: S Renato Bruni, Giancarlo Fantin, Silvia Maietti, Alessandro Medici, Paola Pedrini\* and Gianni Sacchetti

Tetrahedron: Asymmetry 17 (2006) 2287

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C<sub>7</sub>H<sub>10</sub>O endo-Bicyclo[3.2.0]hept-2-en-6-ol

Ee = 85% [by GLC analysis on a 25 m dimethyln-pentyl-cyclodextrin in OV 1701]

 $[\alpha]_{D}^{25} = +57 \ (c \ 1.1, \text{CHCl}_{3})$ 

Source of chirality: plant reduction Absolute configuration: 1*S*,5*R*,6*S* 

Renato Bruni, Giancarlo Fantin, Silvia Maietti, Alessandro Medici, Paola Pedrini\* and Gianni Sacchetti

Tetrahedron: Asymmetry 17 (2006) 2287

OH ....

 $C_7H_{14}O$  cis-2-Methylcyclohexanol

Ee = 24% [by GLC analysis on a 25 m diethyltert-butylsilyl-cyclodextrin in OV 1701]

 $[\alpha]_{D}^{25} = +5 (c 1, MeOH)$ 

Source of chirality: plant reduction Absolute configuration: 1*S*,2*R* 

Renato Bruni, Giancarlo Fantin, Silvia Maietti, Alessandro Medici, Paola Pedrini\* and Gianni Sacchetti

Tetrahedron: Asymmetry 17 (2006) 2287

OH T

C<sub>7</sub>H<sub>14</sub>O *trans*-2-Methylcyclohexanol

Ee = 92% [by GLC analysis on a 25 m diethyltert-butylsilyl-cyclodextrin in OV 1701]  $[\alpha]_{D}^{25} = +37$  (c 9.6, EtOH)

Source of chirality: plant reduction Absolute configuration: 1*S*,2*S* 

Renato Bruni, Giancarlo Fantin, Silvia Maietti, Alessandro Medici, Paola Pedrini\* and Gianni Sacchetti

Tetrahedron: Asymmetry 17 (2006) 2287

СH<sub>3</sub>

1-Phenylethanol

Ee = 100% [by GLC analysis on a 25 m permethylated-cyclodextrin in OV 1701]  $[\alpha]_D^{25} = -43$  (c 5.1, CHCl<sub>3</sub>)

Source of chirality: plant reduction

Absolute configuration: S

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Tetrahedron: Asymmetry 17 (2006) 2287



exo-Bicyclo[3.2.0]hept-2-en-6-ol

Ee = 100% [by GLC analysis on a 25 m dimethyln-pentyl-cyclodextrin in OV 1701]  $[\alpha]_D^{25} = -91$  (c 2.6, CHCl<sub>3</sub>)

Source of chirality: plant reduction Absolute configuration: 1*R*,5*S*,6*S* 

Mikio Fujii,\* Motonori Fukumura, Yumiko Hori, Yasuaki Hirai, Hiroyuki Akita, Kaoru Nakamura, Kazuo Toriizuka and Yoshiteru Ida

Tetrahedron: Asymmetry 17 (2006) 2292

$$C_8H_{12}O_2$$
(S)-Oct-2-en-4-olide

 $[\alpha]_D^{25}$  = +100.4 (c 1.01, CHCl<sub>3</sub>) Source of chirality: (3S)-hept-1-en-3-yl crotonate

Mikio Fujii,\* Motonori Fukumura, Yumiko Hori, Yasuaki Hirai, Hiroyuki Akita, Kaoru Nakamura, Kazuo Toriizuka and Yoshiteru Ida

Tetrahedron: Asymmetry 17 (2006) 2292

$$C_7H_{10}O_2$$
(S)-Hept-2-en-4-olide

 $[\alpha]_D^{25} = +110.0 \ (c \ 1.16, CHCl_3)$  Source of chirality: (3S)-hex-1-en-3-yl crotonate

Mikio Fujii,\* Motonori Fukumura, Yumiko Hori, Yasuaki Hirai, Hiroyuki Akita, Kaoru Nakamura, Kazuo Toriizuka and Yoshiteru Ida

Tetrahedron: Asymmetry 17 (2006) 2292

 $[\alpha]_D^{25} = +94.0$  (c 1.05, CHCl<sub>3</sub>) Source of chirality: (3S)-oct-1-en-3-yl crotonate Mikio Fujii,\* Motonori Fukumura, Yumiko Hori, Yasuaki Hirai, Hiroyuki Akita, Kaoru Nakamura, Kazuo Toriizuka and Yoshiteru Ida Tetrahedron: Asymmetry 17 (2006) 2292

 $[\alpha]_D^{25} = +89.4 (c 1.01, CHCl_3)$ Source of chirality: (3S)-non-1-en-3-yl crotonate

Source of chirality: (3S)-non-1-en-3-yl crotonat

Mikio Fujii,\* Motonori Fukumura, Yumiko Hori, Yasuaki Hirai, Hiroyuki Akita, Kaoru Nakamura, Kazuo Toriizuka and Yoshiteru Ida Tetrahedron: Asymmetry 17 (2006) 2292

Ee>99%  $[\alpha]_{D}^{25} = +6.9 \ (c \ 1.16, \text{CHCl}_{3})$ 

Source of chirality: resolution by lipase-catalyzed esterification

 $C_{11}H_{18}O_2$  (3S)-Hept-1-en-3-yl crotonate

C<sub>10</sub>H<sub>16</sub>O<sub>2</sub>

(S)-Dec-2-en-4-olide

Sjoerd F. G. M. van Nispen, Jeroen van Buijtenen, Jef A. J. M. Vekemans, Jan Meuldijk and Lumbertus A. Hulshof\* Tetrahedron: Asymmetry 17 (2006) 2299

Ee >99%  $[\alpha]_D^{25} = +91.3 \ (c \ 0.98, \text{CHCl}_3)$ 

Source of chirality: dynamic kinetic resolution

Absolute configuration: (R)

 $C_{12}H_{16}O_2$  (R)-1-Phenylethyl butyrate

Vijaya Lingam Manthati, A. Sai Krishna Murthy, Frédéric Caijo, Delphine Drouin, Philippe Lesot, Danielle Grée and René Grée\*

Tetrahedron: Asymmetry 17 (2006) 2306

Ee: 96%

 $[\alpha]_{D}^{21} = +3.0 \ (c \ 1.00, \text{ CHCl}_{3})$ 

Absolute configuration: R

F\_\_\_\_OTBDMS

 $C_{14}H_{28}FOSi$ 

tert-Butyl[(3(R)-fluorohept-1-yn-7-yl)oxy]dimethylsilane

Vijaya Lingam Manthati, A. Sai Krishna Murthy, Frédéric Caijo, Delphine Drouin, Philippe Lesot, Danielle Grée and René Grée\* Tetrahedron: Asymmetry 17 (2006) 2306

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 $C_8H_{11}FO_2$ Methyl 5(R)-fluorohept-6-ynoate Ee: 96% [ $\alpha$ ]<sup>21</sup> = +14.5 (c 0.44, CHCl<sub>3</sub>) Absolute configuration: R