Pd-catalyzed Highly Selective Suzuki Coupling Reactions of Optically Active Chloroalkylidene-β-lactones with LB-Phos as the Ligand

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1H NMR, 13C NMR and HPLC spectra of the products S2-S120
AS-H; n-Hexane:i-PrOH=98:2; 0.8 ml/min; 230nm

Injection Date: 5/18/2010 11:57 AM
Sample Name: lpb-1-107rac
Acq. Operator: lpb
Method: D:\HPCHEM\METHODS\XFX_LC.M
Last changed: 5/18/2010 1:05:27 AM by lpb
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISIDs

Signal 1: WVD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak RetTime Type</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>[min]</td>
<td>[min]</td>
<td>[mAU]</td>
<td>[mAU]</td>
</tr>
<tr>
<td>1</td>
<td>8.653</td>
<td>0.1611</td>
<td>6412.19336</td>
<td>614.07806</td>
</tr>
<tr>
<td>2</td>
<td>10.813BB</td>
<td>0.1963</td>
<td>6425.04297</td>
<td>510.62806</td>
</tr>
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Totals: 1.28372e+04 1124.70313

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-1-128ct

Injection Date: 5/18/2010 11:39:16 AM
Sample Name: lpb-1-128chr
Acq. Operator: lpb
Method: D:\HPCHEM\METHODS\XFX IC.M
Last changed: 5/18/2010 1:05:27 AM by lpb
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: WVD1 A, Wavelength=230 nm

<table>
<thead>
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<th>Peak</th>
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<th>Type</th>
<th>Width</th>
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<th>Height</th>
<th>Area</th>
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<tbody>
<tr>
<td>1</td>
<td>8.369</td>
<td>PB</td>
<td>0.1526</td>
<td>8380.75391</td>
<td>852.08069</td>
<td>99.5112</td>
</tr>
<tr>
<td>2</td>
<td>10.215</td>
<td>BP</td>
<td>0.1739</td>
<td>41.16966</td>
<td>3.60869</td>
<td>0.4898</td>
</tr>
</tbody>
</table>

Totals: 8421.92356 855.76937

Results obtained with enhanced integrator!

*** End of Report ***
Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry
This journal is © The Royal Society of Chemistry 2012
Sample Name: lpb-1-56ac

Injection Date: 6/18/2010 12:25:01 PM
Sample Name: lpb-1-56rac
Acq. Operator: lpb
Method: \DATA\LPB\LPB0050.D
Last changed: 6/18/2010 12:41:48 PM by lpb (modified after loading)

VWD1 A, Wavelength=230 nm (LPB\LPB0050.D)

Aces Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak Ret.Time Type Width Area Height Area
[Min] [min] [mm] [mAU] [\%] [mAU] [\%]
1 13.990 BS 0.3620 1.2021E4 480.80823 100.0000

Totals: 1.2021E4 480.00823

Results obtained with enhanced integrator!

*** End of Report ***
OD-H: n-Hexane:IPA=98:2; 0.8ml/min; 230nm

Injection Date: 3/22/2010 8:27:47 PM
Sample Name: lpb-1-25rac

Acq. Operator: lpb
Method: D:\HPCHEM\METHODS\FX_LC.M
Last changed: 3/22/2010 7:41:23 PM by lpb
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area
-----|-----|--------|------|--------|------|--------|------|
1 9.903 BB 0.2524 1536.69519 91.75461 50.5201
2 12.155 BB 0.3085 1507.01538 73.67002 49.4799

Totals: 3045.71057 165.42483

Results obtained with enhanced integrator!

*** End of Report ***
**Sample Name:** lpb-1-28c

**Injection Date:** 3/22/2010 8:08:03 PM

**Sample Name:** lpb-1-28c

**Acq. Operator:** lpb

**Method:** D:\HPCHEM\METHODS\XFX_LC.M

**Last changed:** 3/22/2010 7:41:23 PM by lpb (modified after loading)

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**Area Percent Report**

**Signal**

**Multiplier:** 1.0000

**Dilution:** 1.0000

**Use Multiplier & Dilution Factor with ISTDs**

**Signal:** VWD1 A, Wavelength=230 nm

**Peak RetTime Type Width Area Height Area %**

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<tr>
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<td>9.807</td>
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**Totals:**

1310.04480
79.56947

Results obtained with enhanced integrator!

---

*** End of Report ***
OD-H, n-Hex:i-PrOH=97/3, 230 nm, 1.0 ml/min

Sample Name: lpb-1-

Injection Date: 12/30/2011 6:16:00 AM
Sample Name: lpb-1-29
Acq. Operator: lpb
Method: D:\HPCHEM\1\METHODS\LQK.M
Last changed: 12/30/2011 5:25:08 AM by lpb
(modified after loading)

Area Percent Report

Signal 1: VWD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak RetTime Type</th>
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<th>Area</th>
<th>Height</th>
<th>Area %</th>
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<tbody>
<tr>
<td>#</td>
<td>[min]</td>
<td>[min]</td>
<td>[mAU]</td>
<td>[mAU]</td>
</tr>
<tr>
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<td>15.002 PB</td>
<td>0.6682</td>
<td>2.83425e+4</td>
<td>632.74915</td>
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<tr>
<td>2</td>
<td>25.434 PB</td>
<td>1.1362</td>
<td>2.84768e+4</td>
<td>375.08118</td>
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Totals:
5.68193e4 1007.83032

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-4-

Injection Date: 12/30/2011 5:42:33 AM
Sample Name: lpb-4-99
Acq. Operator: lpb
Method: D:\HPCHEM1\METHODS\LQK.M
Last changed: 12/30/2011 5:25:08 AM by lpb
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area %
---[min] [min] mAU *s [mAU] ---|---|---|---|---|
1 14.875 VV 0.7674 6.25337e4 6255.65149 99.8548
2 25.800 PP 0.7737 90.92828 1.54572 0.1452

Totals: 6.26247e4 1257.19720

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-1-32z

Injection Date: 4/1/2010 1:55:32 PM
Sample Name: lpb-1-32rac
Acq. Operator: lpb
Method: D:\HPChem\METHODS\XFX_LC.M
Last changed: 4/1/2010 1:34:57 PM by Zab
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: WDV1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>#</th>
<th>RetTime Type</th>
<th>Width</th>
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<th>Height</th>
<th>Area %</th>
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<tbody>
<tr>
<td>1</td>
<td>9.997 BB</td>
<td>0.2542</td>
<td>3350.54028</td>
<td>200.93570</td>
<td>52.5729</td>
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<tr>
<td>2</td>
<td>15.162 BB</td>
<td>0.3959</td>
<td>3022.59229</td>
<td>118.77544</td>
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Totals: 6373.13257 319.71114

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-1-38cl

Injection Date: 4/1/2010 2:15:26 PM
Sample Name: lpb-1-38chr
Acq. Operator: lpb
Method: D:\HPCHEM\METHODS\XPLC.M
Last changed: 4/1/2010 1:34:57 PM by Zxb
(modified after loading)

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak RetTime Type</th>
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<th>Area</th>
<th>Height</th>
<th>Area %</th>
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<th>Height [mAU]</th>
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<tr>
<td>1 9.965 BB</td>
<td>0.3345</td>
<td>1.0949e4</td>
<td>519.89142</td>
<td>100.0000</td>
<td></td>
<td></td>
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</table>

Totals: 1.0949e4 519.89142

Results obtained with enhanced integrator!

*** End of Report ***
S35

**Sz-4d**

溶剂条件：4:98:2
214nm 0.8μl/min

色谱图（sz-4d-06-08-2-0-8-214.jpg）

### 分析结果表

<table>
<thead>
<tr>
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<th>峰名</th>
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<th>峰面积</th>
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<td>770349.656</td>
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分析结果表

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<td>870617.313</td>
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<td>99.914</td>
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<td>15.615</td>
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<td>871995.933</td>
<td>18261244.000</td>
<td>100.000</td>
</tr>
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(S,Z)-4d
AD:H n-Hexane:i-PrOH=98:2; 0.8ml/min; 230nm

Injection Date : 4/3/2010 4:16:04 PM
Sample Name : lpb-1-42chr
Acq. Operator : lpb
Method : D:\HPCHEM\1\METHODS\XFX_LC.M
(modified after loading)

---

VWD1 A, Wavelength=230 nm (LPB\LPB00037.D)

---

**Sorted By : Signal**
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

**Signal 1: VWD1 A, Wavelength=230 nm**

<table>
<thead>
<tr>
<th>Peak RetTime</th>
<th>Type</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area</th>
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<tbody>
<tr>
<td>1 10.351 MN</td>
<td></td>
<td>0.2303</td>
<td>7.40303e4</td>
<td>5357.67529</td>
<td>100.0000</td>
<td></td>
</tr>
</tbody>
</table>

Totals : 7.40303e4 5357.67529

Results obtained with enhanced integrator!

---

*** End of Report ***
**Sample Name:** lpb-1-47r

Injection Date: 4/8/2010 2:00:01 PM

Sample Name: lpb-1-47rac

Acq. Operator: lpb

Method: D:\HPCHEM\METHODS\XFX.IC.M

Last changed: 4/8/2010 1:38:41 PM by lpb
(modified after loading)

Area Percent Report

Signal Multiplier: 1.0000
Dilution: 1.0000

Use Multiplier & Dilution Factor with ISTDs

**Signal 1: VWD1 A, Wavelength=230 nm**

<table>
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<tr>
<th>Peak RetTime Type</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>[min]</td>
<td>[min]</td>
<td>mAU</td>
<td>mAU</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>9.266</td>
<td>0.2666</td>
<td>2631.69946</td>
<td>148.39099</td>
<td>49.9871</td>
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<tr>
<td>2</td>
<td>11.684</td>
<td>0.3369</td>
<td>2633.05322</td>
<td>118.26602</td>
<td>50.0129</td>
</tr>
</tbody>
</table>

Totals:

5264.75269
266.65701

Results obtained with enhanced integrator!

*** End of Report ***
Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

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<th>Height</th>
<th>Area %</th>
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<tbody>
<tr>
<td>9.250</td>
<td>VV</td>
<td>0.2733</td>
<td>8474.36035</td>
<td>466.02618</td>
<td>100.0000</td>
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<tr>
<td></td>
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</tr>
</tbody>
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Totals: 8474.36035 466.02618

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: pb-1-132cl

Injection Date: 5/8/2010 9:04:29 PM
Sample Name: pb-1-132chr
Acq. Operator: lob
Acq. Method: D:\HPCHEM1\METHODS\XFC_LC.M
Last changed: 5/8/2010 8:29:29 PM by lpb
(modified after loading)
Analysis Method: D:\HPCHEM1\METHODS\XFC_LC.M
Last changed: 5/8/2010 9:26:02 PM by lpb
(modified after loading)

VWD1 A, Wavelength=230 nm (PBLPBM00059.D)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak Ret Time</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 8.972 min</td>
<td>0.2502</td>
<td>1.45349e4</td>
<td>883.33746</td>
<td>100.0000</td>
</tr>
</tbody>
</table>

Totals:
1.45349e4 883.33746

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-1-133rac

OD=H; n-Hexane:i-PrOH=98:2; 0.8 ml/min; 230nm

Injection Date : 5/18/2010 9:34:38 PM  Location : -
Sample Name : lpb-1-133rac
Method : D:\HPCHEM\METHODS\XFX_LC.M
Last changed : 5/18/2010 8:36:56 PM by YMJ
(modified after loading)

Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VW01 A, Wavelength=230 nm

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<tr>
<th>#</th>
<th>RetTime [min]</th>
<th>Width [min]</th>
<th>Area [mAU]</th>
<th>Height [mAU]</th>
<th>Area [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12.814</td>
<td>0.3506</td>
<td>4200.77783</td>
<td>182.13429</td>
<td>50.0893</td>
</tr>
<tr>
<td>2</td>
<td>19.019</td>
<td>0.5590</td>
<td>4185.79834</td>
<td>114.11437</td>
<td>49.9107</td>
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Totals : 8386.57617 296.24866

Results obtained with enhanced integrator!

*** End of Report ***
Injection Date: 5/18/2010 10:20:37 PM
Sample Name: lpb-1-135chr
Acq. Operator: lpb
Method: n:\hpchem1\methods\xfx_lct.m
Last changed: 5/18/2010 8:36:56 PM by ywv
(modified after loading)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

| Peak Ret Time Type Width Area Height Area % |
|----|------|--------|--------|-----------------|
| 1  | 12.225 | 0.3389 | 2.22563e4 | 997.52686 100.0000 |

Totals: 2.22563e4 997.52686

Results obtained with enhanced integrator!

*** End of Report ***
Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD A, Wavelength=230 nm

<table>
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<tr>
<th>Peak RetTime Type</th>
<th>Width</th>
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<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>min</td>
<td>min</td>
<td>mAU</td>
<td>mAU</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>7.935</td>
<td>0.1978</td>
<td>5153.7168</td>
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<td>2</td>
<td>10.534</td>
<td>0.2727</td>
<td>5164.7876</td>
<td>288.80652</td>
</tr>
</tbody>
</table>

Totals: 1.03185e4 682.75467

Results obtained with enhanced integrator!

*** End of Report ***
Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry
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S66

Data File: D:\HPCHEN\i\DATA\LPB\LPB00065.D
Sample Name: lpb-1-134cl
OD-H: n-Hexane:i-PrOH=98:2; 0.8 ml/min; 230nm

Injection Date : 5/18/2010 9:15:19 PM
Sample Name : lpb-1-134chr
Acq. Operator : lpb
Method : D:\HPCHEN\i\METHOD\H\FX_LC.M
Last changed : 5/18/2010 8:36:56 PM by yw
(modified after loading)

WVID A, Wavelength=230 nm (LPB/LPB00065.D)

Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: WVID A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area
# [min] [min] mAU * s [mAU ] %
---|-------|--------|--------|----------|
1  8.064 BB  0.2064  6060.86816  446.59583  100.0000

Totals:
  6060.86816  446.59583

Results obtained with enhanced integrator!

*** End of Report ***
Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry
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Data File D:\HPCHEM\DATA\LPS\LPS000207.D
Sample Name: lpb-2-40

AD, n-Hex:1-ProH = 98/2, 230 nm, 0.8 mL/min

Injection Date : 1/1/1999 1:38:51 AM
Sample Name : lpb-2-40
Acq. Operator : lpb
Method : D:\HPCHEM\METHODS\XFX_LC.M
last changed : 1/1/1999 1:36:32 AM by lpb
(modified after loading)

OD-N, n-Hex:1-ProH=90:10, 254 nm, 0.8 min/ml

Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

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<tr>
<th>Peak RetTime Type Width Area Height Area</th>
<th>[min]</th>
<th>[min]</th>
<th>mAU</th>
<th>*s</th>
<th>[mAU]</th>
<th>%</th>
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</thead>
<tbody>
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<td>845.16956</td>
<td>49.3586</td>
<td></td>
<td></td>
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<tr>
<td>2 9.432 VB</td>
<td>0.1704</td>
<td>8913.30644</td>
<td>776.22162</td>
<td>50.6414</td>
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<td></td>
</tr>
</tbody>
</table>

Totals : 1.76008e+4 1621.39117

Results obtained with enhanced integrator!

*** End of Report ***
Data File Dr:\HPCHEM1\DATA\LFB\LPB00200.D

Sample Name: lpb-2-43

Injection Date : 1/1/1999 1:54:27 AM
Sample Name : lpb-2-43
Acq. Operator : lpb
Method : D:\HPCHEM1\METHODS\XFP LC.M
Last changed : 1/1/1999 1:36:32 AM by lpb
(modified after loading)

CD-H, n-Hex:1-PrOH=98/2, 230 nm, 0.8 mL/min

---

Area Percent Report
---

Sorted By : Signal
Multiplier : 1.0000
Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area
--- | [min] | [min] | mAU | s | mAU | %
----- | ------ | ------ | ------ | ------ | ------ | ------
1  7.953 VV  0.1549  1.57440E6  1512.87939  99.6409
2  8.515 VV  0.1445  56.74415  5.53025  0.3591

Totals : 1.99007E6  1519.40964

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\RCH\DATA\LPB\LPB00210.D

Sample Name: ipb-2-8

Injection Date: 3/22/2011 11:37:32 AM
Sample Name: ipb-2-80
Acq. Operator: ipb
Method: D:\RCH\METHODS\XPF_LC.M
Last changed: 3/22/2011 11:02:02 AM by ipb (modified after loading)

IC, n-Hex:i-ProH=98:2, 214 nm, 0.6ml/min

Wavelength=230 nm (LPB\LPB00210.D)

Area Percent Report

Signal 1: VWD 1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak RetTime Type Width</th>
<th>Area</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td># [min] [min] mAU s [mAU]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 15.038 VS 0.4361 1152.88220</td>
<td>40.42958</td>
<td>43.3195</td>
<td></td>
</tr>
<tr>
<td>2 16.202 VS 0.5009 1508.46411</td>
<td>45.77988</td>
<td>56.6805</td>
<td></td>
</tr>
</tbody>
</table>

Totals: 2661.34631 96.20526

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\HPCHEM\DATA\LPB\LPB00218.D  
Sample Name: lpb-2-84

Injection Date : 3/22/2011 6:37:04 PM
Sample Name : lpb-2-84  
Acq. Operator : lpb
Acq. Method : D:\HPCHEM\METHODS\XY2010.M
Last changed : 3/22/2011 6:33:48 PM by lpb
(modified after loading)
Analysis Method : D:\HPCHEM\METHODS\XY2010.M
Last changed : 3/22/2011 7:18:13 PM by lpb
(modified after loading)
AD-H, n-Hex:i-PrOH=83:17, 254 nm, 1ml/min

Area Percent Report

 signal  :  Signal
Multiplier :  1.0000
Dilution :  1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=254 nm

Peak RetTime Type Width Area Height Area
<table>
<thead>
<tr>
<th>#</th>
<th>[min]</th>
<th>----------</th>
<th>---------</th>
<th>----------</th>
<th>---------</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.622 MM</td>
<td>0.4571</td>
<td>12.01621</td>
<td>4.38166e-1</td>
<td>0.2521</td>
</tr>
<tr>
<td>2</td>
<td>16.593 VB</td>
<td>0.5719</td>
<td>4754.33643</td>
<td>126.66228</td>
<td>99.7479</td>
</tr>
</tbody>
</table>

Totals : 4766.35264 127.10045

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\HPChem\1\DATA\LPB\LPB00221.D

Sample Name: lpb-2-86

Injection Date : 3/30/2011 11:23:24 PM
Sample Name : lpb-2-86
Acq. Operator : lpb
Method : D:\HPChem\1\Methods\XY.2010.M
Last changed : 3/30/2011 10:20:15 PM by lqk
(modified after loading)

AD-H, n-Hex:i-ProOH=63:17, 254 nm, 1ml/ml

Area Percent Report

Signal 1: VWD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>#</th>
<th>RetTime [min]</th>
<th>Width [min]</th>
<th>Area [mAU * s]</th>
<th>Area [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.254</td>
<td>0.1668</td>
<td>4727.89502</td>
<td>409.23996</td>
</tr>
<tr>
<td>2</td>
<td>8.301</td>
<td>0.1739</td>
<td>4658.92090</td>
<td>391.03540</td>
</tr>
<tr>
<td>Totals</td>
<td>9386.81592</td>
<td>800.27536</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results obtained with enhanced integrator!

*** End of Report ***
**Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry**

**Sample Name:** lpb-2-100

**Injection Date:** 3/30/2011 11:58:47 AM

**Location:** -

**Sample Name:** lpb-2-100

**Acq. Operator:** lpb

**Method:** D:\HPChem\1\Method\XV32010.M

**Last changed:** 3/30/2011 10:20:16 PM by lqk

(modified after loading)

**AD-H, n-Hex:i-PrOH=83:17, 254 nm, 1min/ml**

**VWD1 A, Wavelength=230 nm (LPB1LPB00222.D)**

---

**Area Percent Report**

---

**Sorted By:** Signal

**Multiplier:** 1.0000

**Dilution:** 1.0000

**Use Multiplier & Dilution Factor with ISTDs**

**Signal 1: VWD1 A, Wavelength=230 nm**

<table>
<thead>
<tr>
<th>Peak</th>
<th>RetTime</th>
<th>Type</th>
<th>Width</th>
<th>Area [mAU]</th>
<th>Height [mAU]</th>
<th>Area [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.201</td>
<td>BB</td>
<td>0.1638</td>
<td>2914.80835</td>
<td>255.63170</td>
<td>100.000</td>
</tr>
</tbody>
</table>

**Totals:**

2914.80835 255.63170

**Results obtained with enhanced integrator:**

---

*** End of Report ***
Data File D:\HPChem\DATA\LPB\LPB00297.D
Sample Name: lpb-2-133

Injection Date: 1/1/2004 5:45:46 AM
Location: 

Method: D:\HPChem\METHODS\VFX_LC.M

Last changed: 1/1/2004 5:25:00 AM by lpb
(modified after loading)

---

Area Percent Report

Signal: VWD A, Wavelength=230 nm
Multiplier: 1.0000
Dilution: 1.0000

Use Multiplier & Dilution Factor with ISTDs

<table>
<thead>
<tr>
<th>Peak RetTime</th>
<th>Type</th>
<th>Width [min]</th>
<th>Area [mAU]</th>
<th>Height [mAU]</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.255 VV</td>
<td></td>
<td>0.1478</td>
<td>192.229844</td>
<td>198.77501</td>
</tr>
<tr>
<td>9.923 HV</td>
<td></td>
<td>0.2154</td>
<td>1943.87817</td>
<td>140.37578</td>
</tr>
</tbody>
</table>

Total: 3866.17761 339.15079

Results obtained with enhanced integrator!

*** End of Report ***
**Data File**: D:\HPChem\DATA\LPB\LPF00299.D  
**Sample Name**: pb-3-1

**AS-H, n-Hex:PrOH= 98/2, 0.8 mL/min, 230 nm**

---

**Injection Date**: 1/1/2004 6:24:42 AM  
**Sample Name**: pb-3-1  
**Acq. Operator**: pb  
**Method**: D:\HPChem\METHODS\FPK_LC.M  
**Last changed**: 1/1/2004 5:25:00 AM by pb  
*modified after loading*

---

**Area Percent Report**

---

**Signal 1: VWD1 A, Wavelength=230 nm**

| Peak RetTime Type Width Area Height Area % |
|-----------------|------|-------|------------------|-------|
| 7.180 VV        | 0.1476 | 1.16244e4 | 1204.18713 | 100.000 |

**Totals**:  
1.16244e4 1204.18713

---

*Results obtained with enhanced integrator!*

---

*** End of Report ***

---
**Data File** D:\HPCHEM\DATA\LPB\LPB00248.D

**Sample Name:** lpb-3-t

---

**Injection Date:** 7/23/2011 3:25:14 AM
**Sample Name:** lpb-3-61
**Acq. Operator:** lpb
**Method:** D:\HPCHEM\METHODS\LQK.M
**Last changed:** 7/23/2011 3:14:08 AM by lpb
(modified after loading)

---

**Area Percent Report**

**Signal 1: VND1 A, Wavelength=230 nm**

<table>
<thead>
<tr>
<th>Peak RetTime</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td># [min]</td>
<td>[min]</td>
<td>mAU</td>
<td>s [mAU]</td>
<td>%</td>
</tr>
<tr>
<td>1 6.416 VB</td>
<td>0.1185</td>
<td>9481.05566</td>
<td>1237.15137</td>
<td>49.4890</td>
</tr>
<tr>
<td>2 8.799 VV</td>
<td>0.1693</td>
<td>9676.84570</td>
<td>888.28943</td>
<td>50.5110</td>
</tr>
</tbody>
</table>

**Totals:** 1.91579e4 2125.44080

Results obtained with enhanced integrator!

*** End of Report ***
Sample Name: lpb-3-f


Acq. Method: D:\HPChem\METHODS\LQK.M

Analysis Method: D:\HPChem\METHODS\LQK.M

Area Percent Report

Sort by: Signal
Multiplier: 1.0000
Dilution: 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area %
--- | --- | --- | --- | --- | --- |
1 6.251 BB 0.1776 2.6566464 2418.60937 99.7164
2 8.397 VB 0.1553 76.39285 7.58828 0.2836

Totals: 2.69328e4 2426.19765

Results obtained with enhanced integrator:

*** End of Report ***
Data File D:\HPCHEM\1\DATA\LPB\LPB0200.D
Sample Name: lpb-1-78

Injection Date : 11/1/2010 1:43:03 PM
Sample Name : lpb-1-78
Acq. Operator : lpb
Method : D:\HPCHEM\1\METHODS\XFX_LC.M
Last changed : 11/1/2010 10:47:23 AM by wxq
(modified after loading)

---

Acre Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: WWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area %
   [min] [min] mAU [mAU]
1 10.150 PB 0.2869 5954.25195 313.82913 49.8957
2 14.785 PB 0.4192 5979.15479 216.88551 50.1043

Totals : 1.1933464 530.71465

Results obtained with enhanced integrator!

*** End of Report ***
Data File: D:\HPCHEM1\DATA\LPB\LPB00201.D

Sample Name: lpb-2-1

GO=H,Hex:i-PrOH=98/2, 230nm, 1.0 ml/min

Injection Date : 11/1/2010 2:03:41 PM
Sample Name : lpb-2-1
Acq. Operator : lpb
Method : D:\HPCHEM1\MRTXN4\LPB00201.D
Last changed : 11/1/2010 10:47:23 AM by wxq
(modified after loading)

Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=230 nm

<table>
<thead>
<tr>
<th>Peak RetTime</th>
<th>Type</th>
<th>Width</th>
<th>Area</th>
<th>Height</th>
<th>Area %</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.025</td>
<td>FB</td>
<td>0.2853</td>
<td>7493.20215</td>
<td>395.13113</td>
<td>99.9865</td>
</tr>
<tr>
<td>14.657</td>
<td>MM</td>
<td>0.2554</td>
<td>101386</td>
<td>6.63530e-2</td>
<td>0.0135</td>
</tr>
</tbody>
</table>

Totals :
7494.21601 395.19730

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\HPChem\DATA\LPB\LPB00239.D
Sample Name: lpb-2-138

OD-H, Hex:PrOH=90:10, 230 nm, 1.0 ml/min

Injection Date: 1/1/2004 1:10:54 AM
Sample Name: lpb-2-138
Acq. Operator: lpb
Method: D:\HPChem\METHODS\LQK.M
Last changed: 1/1/2004 1:04:38 AM by lpb
(modified after loading)

AD-H, n-Hex:PrOH=80:20, 254 nm, 1 ml/min

WVD1 A, Wavelength=230 nm (LPB00239.D)

Area Percent Report

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: WVD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area
# [min] # [min] mAU *s [mAU ] %
1 9.136 PB 0.3018 5177.22559 252.52927 49.9349
2 18.117 BB 0.6204 5190.71436 123.03040 50.0651
Total: 1.03679e4 375.55967

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\RPCHEM1\DATA\LPB\LPB00275.D
Sample Name: lpb-1-29

Injection Date : 3/2/2012 7:20:28 PM
Sample Name : lpb-1-29
Acq. Operator : lpb
Acq. Method : D:\RPCHEM1\METHODS\XFX_LC.M
Last changed : 3/2/2012 6:47:49 PM by lpb
(modified after loading)
Analysis Method : D:\RPCHEM1\METHODS\XFX_LC.M
Last changed : 3/2/2012 7:48:18 PM by lpb
(modified after loading)

IC, n-Hex:1-PrOH=98:2, 214 nm, 0.6min/ml

Area Percent Report

signal 1: Wavelength=230 nm

Peak Ret.Time Type Width Area Height Area
# [min] [min] mAU *s [mAU] %
---|------|--------|--------|--------|------|
1 9.680 PB 0.3690 1.59535e4 622.24371 49.8991
2 14.733 VB 0.5869 1.60181e4 402.25137 50.1009

Totals : 3.19716e4 1024.49509

Results obtained with enhanced integrator!

*** End of Report ***
Data File D:\HPCH\DATA\LPB\LPB00274.D

OD-H, n-Hex:i-ProOH = 95/5, 1.0 mL/min, 230 nm

Injection Date: 3/2/2012 6:55:47 PM
Sample Name: lpb-4-138  Location: -
Acq. Operator: lpb
Acq. Method: D:\HPCH\METHODS\KFX LC.M
Last changed: 3/2/2012 6:47:49 PM by lpb (modified after loading)
Analysis Method: D:\HPCH\METHODS\KFX LC.M
Last changed: 4/10/2012 2:52:27 PM by xfx

---

Area Percent Report

---

Sorted By: Signal
Multiplier: 1.0000
Dilution: 1.0000
Use Multiplier & Dilution Factor with ISIDs

Signal 1: VWD1 A, Wavelength=230 nm

Peak RetTime Type Width Area Height Area
------- ------ -------- -------- --------
  1 9.730 PB 0.4009 2.28115e4 837.23230 100.0000

Totals: 2.28115e4 837.23230

Results obtained with enhanced integrator!

*** End of Report ***