Electronic Supplementary Information

Effect of C7-Substitution of 1-Arylsulfonyl-5-(N-hydroxyacrylamide)indolines on the Selectivity Toward Subclass of Histone Deacetlyase.

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HPLC purity data for synthetic compounds............................................ ESI2
1H-NMR Spectra for synthetic compounds............................................ ESI3
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HPLC purity determination:
The percentage purity of compounds were determined by an Agilent 1100 series HPLC system using C18 column.
Elution conditions: Mobile phase A-Acetonitrile; Mobile phase B-Water containing 0.1% formic acid + 10 mmol NH₄OAc. The flow-rate was 0.2 ml/min and the injection volume was 5 μl. The system operated at 25 °C. Peaks were detected at 210 nm.

<table>
<thead>
<tr>
<th>Time (min)</th>
<th>Mobile Phase A (ratio)</th>
<th>Mobile Phase B (ratio)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>45</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>50</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>60</td>
<td>10</td>
<td>90</td>
</tr>
</tbody>
</table>

Table 2. Purity of synthetic compounds
C18 column: Agilent ZORBAX Eclipse XDB-C18 5μm. 4.6 mm × 150 mm column

<table>
<thead>
<tr>
<th>Compounds</th>
<th>Retention time (min)</th>
<th>% Purity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>20.71</td>
<td>96.52</td>
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<tr>
<td>10</td>
<td>23.26</td>
<td>95.91</td>
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<tr>
<td>11</td>
<td>23.72</td>
<td>95.60</td>
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<tr>
<td>12</td>
<td>24.29</td>
<td>97.54</td>
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<tr>
<td>13</td>
<td>24.89</td>
<td>98.95</td>
</tr>
<tr>
<td>17</td>
<td>22.12</td>
<td>94.52</td>
</tr>
</tbody>
</table>
$^1$H Spectrogram for compound 9
$^1$H Spectrum for compound 10
$^1$H Spectrum for compound 11
$^1$H Spectrum for compound 12
$^1$H Spectrum for compound 13
$^1$H Spectrum for compound 14
$^1$H Spectrum for compound 15
$^1$H Spectrum for compound 16
$^1$H Spectrum for compound 17
"1H Spectrum for compound 18"
$^1$H Spectrum for compound 19
$^1$H Spectrum for compound 21
$^1$H Spectrum for compound 22a
$^1$H Spectrum for compound 22b
$^1$H Spectrum for compound 22c
$^1$H Spectrum for compound 22d
$^1$H Spectrum for compound 22e
$^1$H Spectrum for compound 22i
$^1$H Spectrum for compound 22j
$^1$H Spectrum for compound 22k
$^1$H Spectrum for compound 24
$^1$H Spectrum for compound 25c
$^1$H Spectrum for compound 25d
$^1$H Spectrum for compound 25e
\(^1\)H Spectrum for compound 26c
$^1$H Spectrum for compound 26d

![NMR Spectrum Image]
$^1$H Spectrum for compound 26e
$^1$H Spectrum for compound 27c
$^1$H Spectrum for compound 27d
$^1$H Spectrum for compound 27e
$^1$H Spectrum for compound 28f
$^1$H Spectrum for compound 28g
$^1$H Spectrum for compound 28h
$^1$H Spectrum for compound 30
$^1$H Spectrum for compound 31
$^1$H Spectrum for compound 32
$^{13}$C Spectrum for compound 9
$^{13}$C Spectrum for compound 10
$^{13}$C Spectrum for compound 11
$^{13}$C Spectrum for compound 12
$^{13}$C Spectrum for compound 13
$^{13}$C Spectrum for compound 14
$^{13}$C Spectrum for compound 15
$^{13}$C Spectrum for compound 16
$^{13}$C Spectrum for compound 17
$^{13}$C Spectrum for compound 18
$^{13}$C Spectrum for compound 19
$^{13}$C Spectrum for compound 22b
$^{13}$C Spectrum for compound 22c
$^{13}$C Spectrum for compound 22d
$^{13}$C Spectrum for compound 22e
$^{13}$C Spectrum for compound 22i
$^{13}$C Spectrum for compound 22j
$^{13}$C Spectrum for compound 22k

- Peaks at various ppm values.
$^{13}$C Spectrum for compound 25c
$^{13}$C Spectrum for compound 25d
$^{13}$C Spectrum for compound 25e

![13C Spectrum Diagram]
$^{13}$C Spectrum for compound 26c
$^{13}$C Spectrum for compound 26d
$^{13}$C Spectrum for compound 26e
$^{13}$C Spectrum for compound 27c
$^{13}$C Spectrum for compound 27d
$^{13}$C Spectrum for compound 28f
$^{13}$C Spectrum for compound 28g
$^{13}$C Spectrum for compound 28h
$^{13}$C Spectrum for compound 31
$^{13}$C Spectrum for compound 32