SUPPLEMENTARY INFORMATION

Colorimetric screening of β-glucosidase inhibition based on gold nanocomposites

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Table S1. Determination of β-glucosidase activity in the compost extracts sample

<table>
<thead>
<tr>
<th>Samples</th>
<th>Added</th>
<th>Detected using gold-cellobiose nanocomposites&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Detected by DNS colorimetric assay method&lt;sup&gt;b&lt;/sup&gt;</th>
<th>R.S.D. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>10.0</td>
<td>11.8 ± 0.56</td>
<td>9.8 ± 0.73</td>
<td>4.7</td>
</tr>
<tr>
<td>C2</td>
<td>30.0</td>
<td>32.1 ± 1.54</td>
<td>30.4 ± 1.45</td>
<td>4.8</td>
</tr>
<tr>
<td>C3</td>
<td>50.0</td>
<td>55.6 ± 2.25</td>
<td>51.8 ± 1.20</td>
<td>4.0</td>
</tr>
<tr>
<td>C4</td>
<td>90.0</td>
<td>92.4 ± 3.58</td>
<td>88.6 ± 2.55</td>
<td>3.9</td>
</tr>
</tbody>
</table>

<sup>a,b</sup> Means ± standard deviations of three measurements.
**Fig. S1.** The β-glucosidase concentration-dependent color changes. From left to right: 300 U L⁻¹; 250 U L⁻¹; 100 U L⁻¹; 60 U L⁻¹; 30 U L⁻¹; 15 U L⁻¹; 3 U L⁻¹; 1.5 U L⁻¹; 0.3 U L⁻¹; Control sample.
Fig. S2. Absorption spectra of the gold-cellobiose nanocomposites at 20 min after incubation with different concentrations of β-glucosidase (from 3 U L\(^{-1}\) to 100 U L\(^{-1}\)).