Supplementary Materials

**Table S1.** Chemical characterization of phytosterols in HCF1 by HPLC-MS/MS.

<table>
<thead>
<tr>
<th>Peak no.</th>
<th>Retention Time (min)</th>
<th>[M+H]+</th>
<th>[M+Na]+</th>
<th>[M+K]+</th>
<th>MS/MS</th>
<th>Identification</th>
<th>Quantitative Estimation (% Area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29.77</td>
<td>401</td>
<td>423</td>
<td>439</td>
<td>383 [M+H-H₂O]+; 161</td>
<td>CAMP</td>
<td>13.9</td>
</tr>
<tr>
<td>2</td>
<td>32.94</td>
<td>415</td>
<td>-</td>
<td>-</td>
<td>397 [M+H-H₂O]+; 161</td>
<td>BSS</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>33.97</td>
<td>417</td>
<td>439</td>
<td>455</td>
<td>399 [M+H-H₂O]+; 163</td>
<td>SS</td>
<td>11.6</td>
</tr>
</tbody>
</table>

The quantitative estimation of CAMP, BSS and SS were expressed in percent area with respect to the total chemical content of HCF1.

**Figure S1.** TIC chromatography of Herba Cistanches Fraction One (HCF1), a semi-purified fraction of Cistanches Herba by HPLC-MS/MS. The TIC chromatography of HCF1 was obtained as described in Materials and methods. Data were expressed as relative abundance of particular chemical constituents (1: campesterol (CAMP); 2: BSS and 3: sitostanol (SS)).