Online Resource 1

1. The sugar composition (mol%) of polysaccharide extracted from Aloe vera gel obtained from TFA hydrolysis by GC-MS [1]

<table>
<thead>
<tr>
<th>Sugar</th>
<th>Ara</th>
<th>Rha</th>
<th>Fuc</th>
<th>Xyl</th>
<th>Man</th>
<th>Glc</th>
<th>Gal</th>
<th>GalA</th>
<th>GlcA</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>0.7</td>
<td>0.2</td>
<td>0.34</td>
<td>0.7</td>
<td>77.18</td>
<td>15.3</td>
<td>4.9</td>
<td>0.7</td>
<td>ND</td>
</tr>
</tbody>
</table>

2. Representative HPLC chromatogram of acemannan. Acemannan was analyzed by high-performance liquid chromatography (Shimadzu, Japan) equipped with a reflective index detector (RID-10A; Shodex, Japan). Separation was carried out by using Sugar KS-804 column (8x300 mm.; Shodex, Japan) at 50 °C and water as the mobile phase at a flow rate of 1 ml/min. Acemannan migrated as a single fraction on HPLC, at approximately molecular weight \( \geq 8 \times 10^5 \) Dalton as compared with the Shodex standard P-82 (Shodex, Japan)
3. The $^{13}$C-NMR spectra of acemannan. Briefly, the polysaccharide powder treated with endo (1→4)-β-D-mannanase and a D-galactosidase, followed by endo- (1→4)-β-D-glucanase (A) compared with the spectra reported by Tai-nin Chow, J. et al at (B) [2]

![NMR spectra A](image1)

![NMR spectra B](image2)

References
