

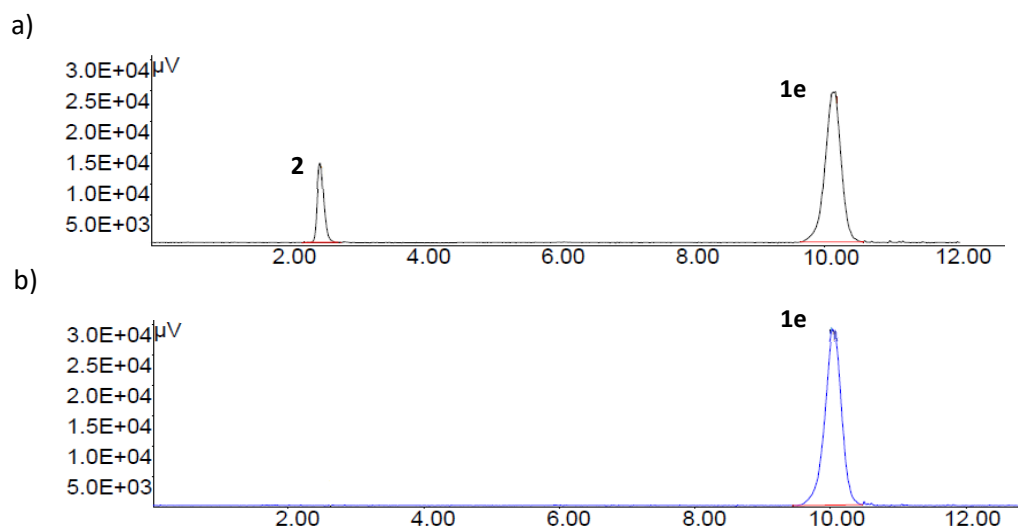
**Supplementary Material for**  
**Enzymatic Synthesis and Molecular Modeling Studies of Rhamnose Esters using**  
**Lipase from *Pseudomonas stutzeri***

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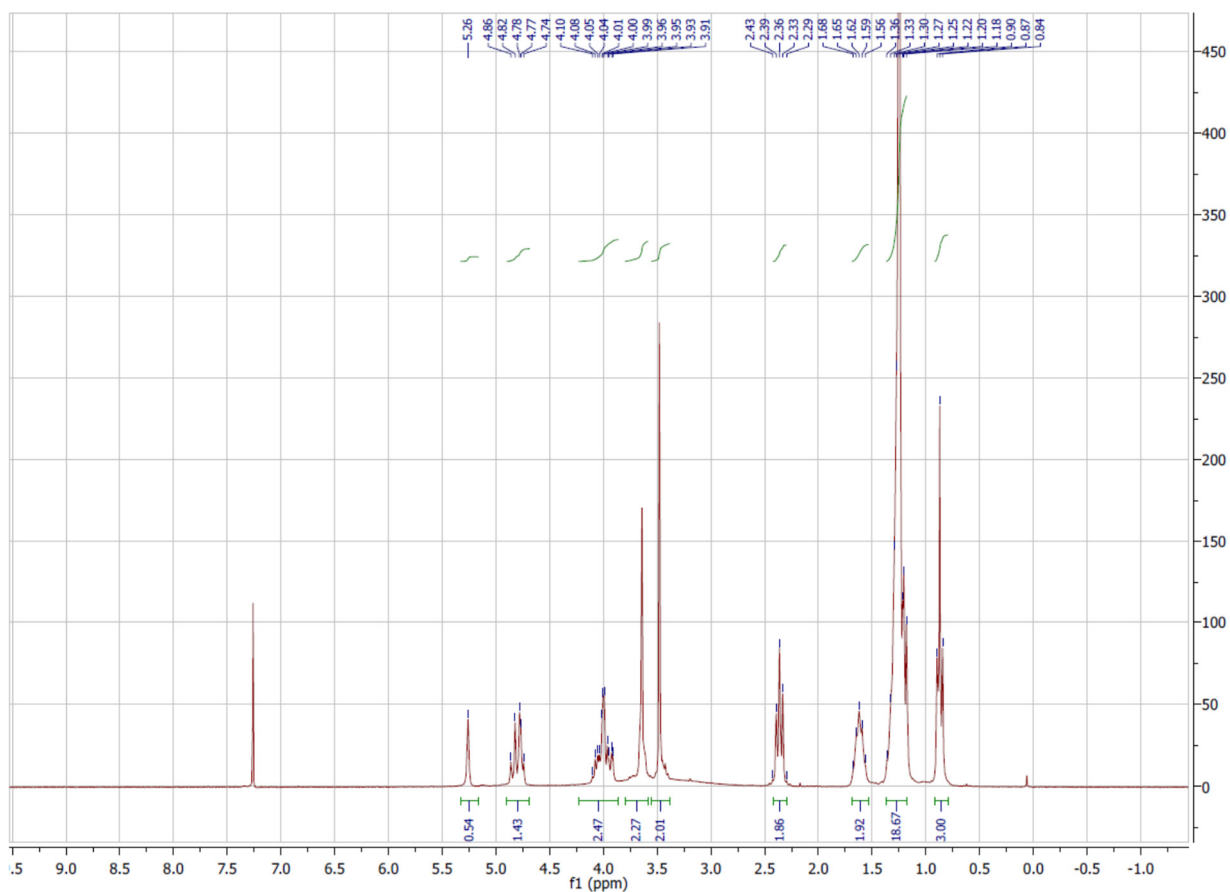
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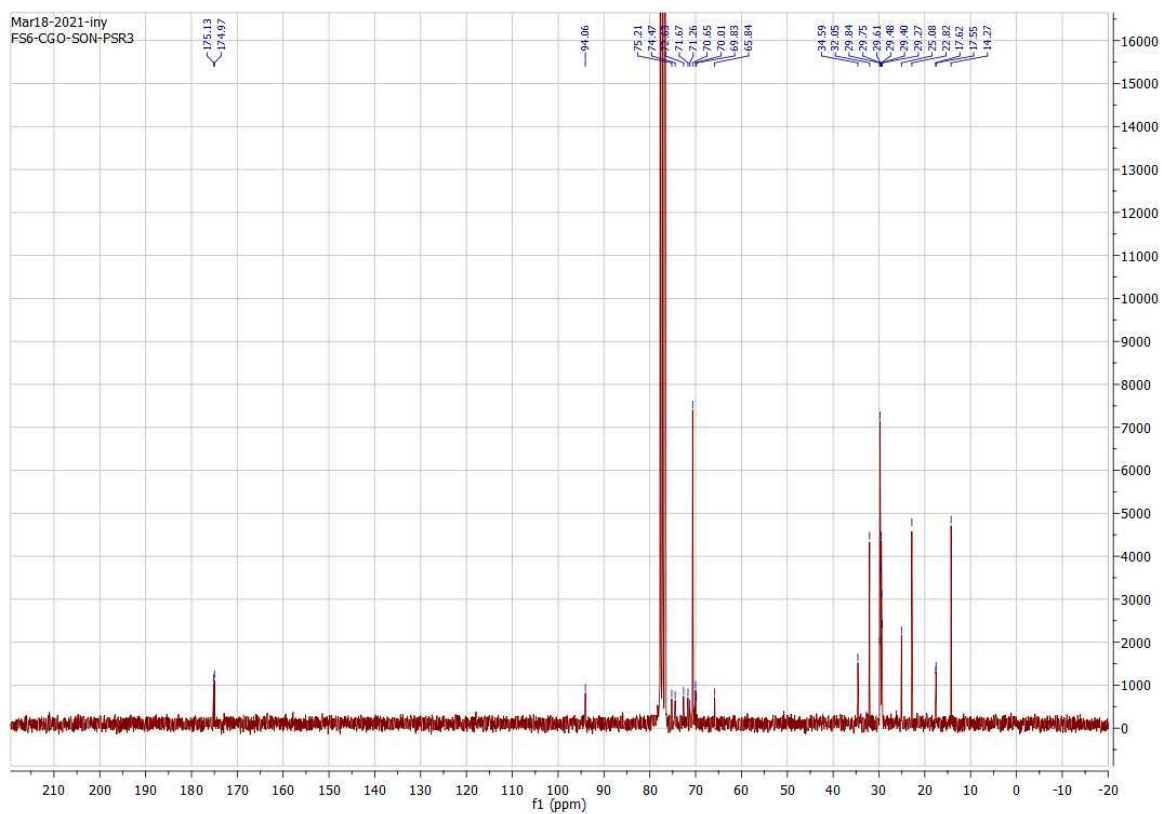
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**Figure S1.** HPLC analyses of different reaction times of the PSL-catalysed transesterification reaction of **2** with the acyl donor **3e** (synthesis of **1e**); mobile phase: acetonitrile:water, 70:30, flow 0.7 mL/min: a) reaction time 2 h; b) reaction time 3 h.



**Figure S2.**  $^1\text{H}$ -NMR spectra 4-*O*-lauroylrhamnose (**1e**).



**Figure S3.**  $^{13}\text{C}$ -NMR spectra 4-*O*-lauroylrhamnose (**1e**).

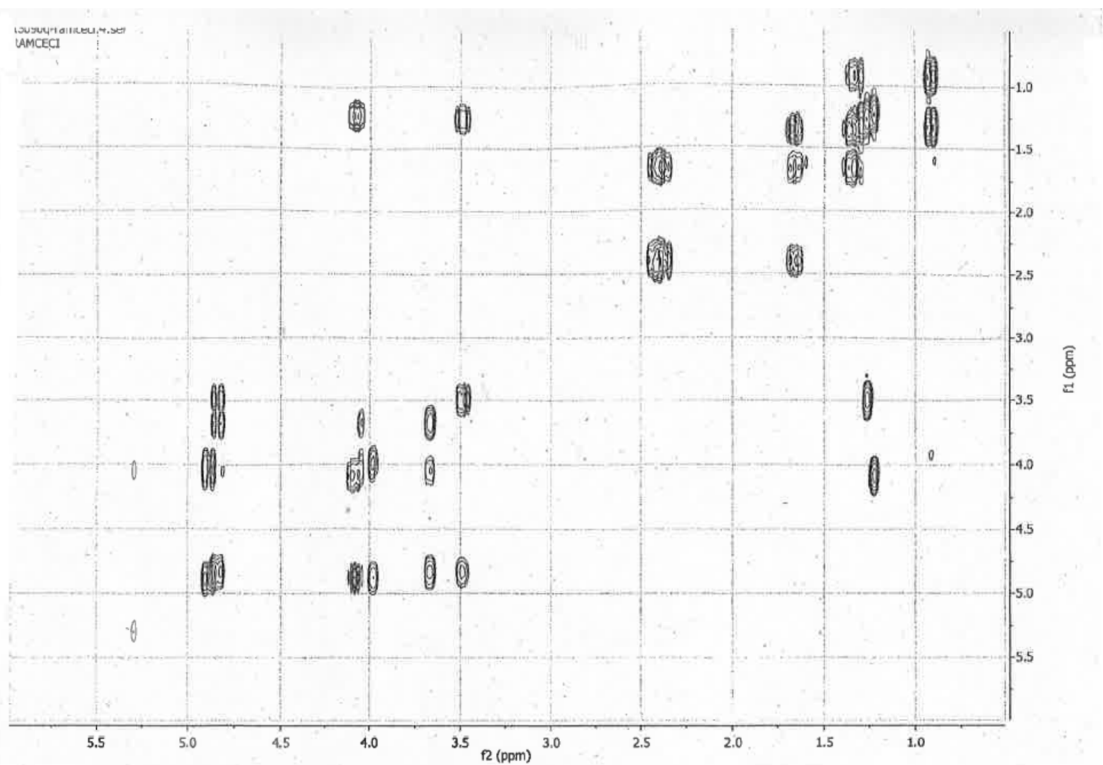


Figure S4. COSY spectrum of 4-O-lauroylrhamnose (**1e**)

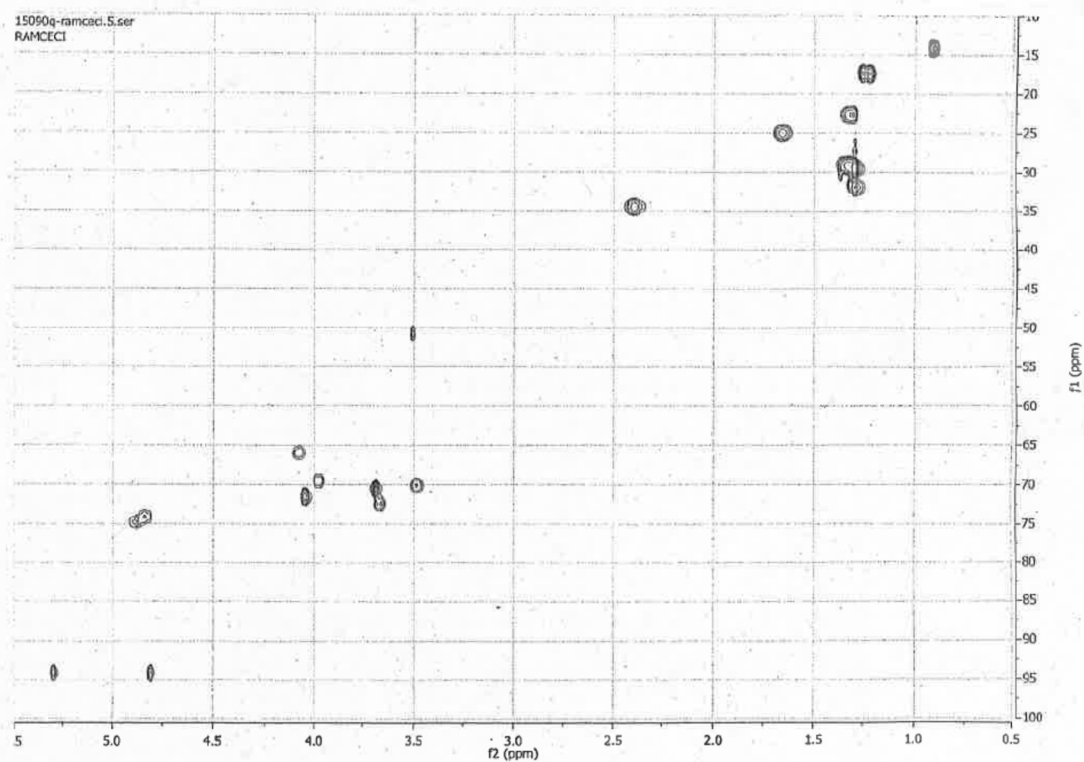


Figure S5. HSQC spectrum of 4-O-lauroylrhamnose (**1e**)

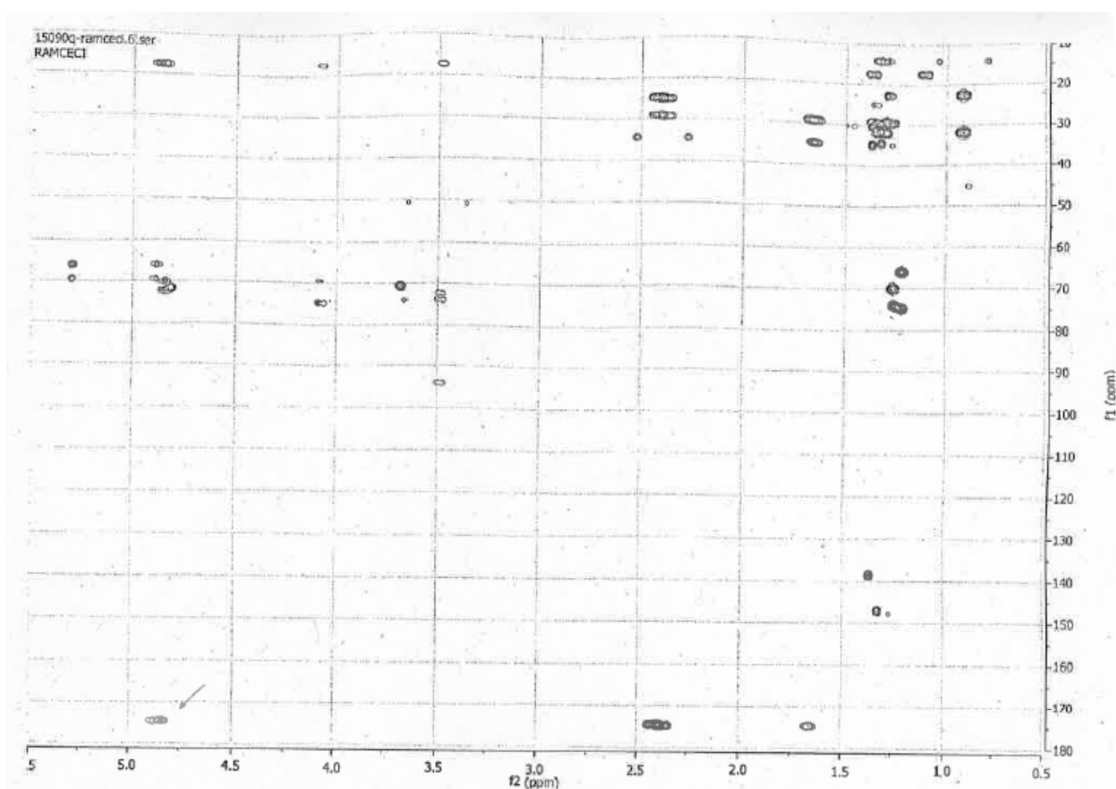


Figure S6. HMBC spectrum of 4-O-lauroylrhamnose (**1e**)

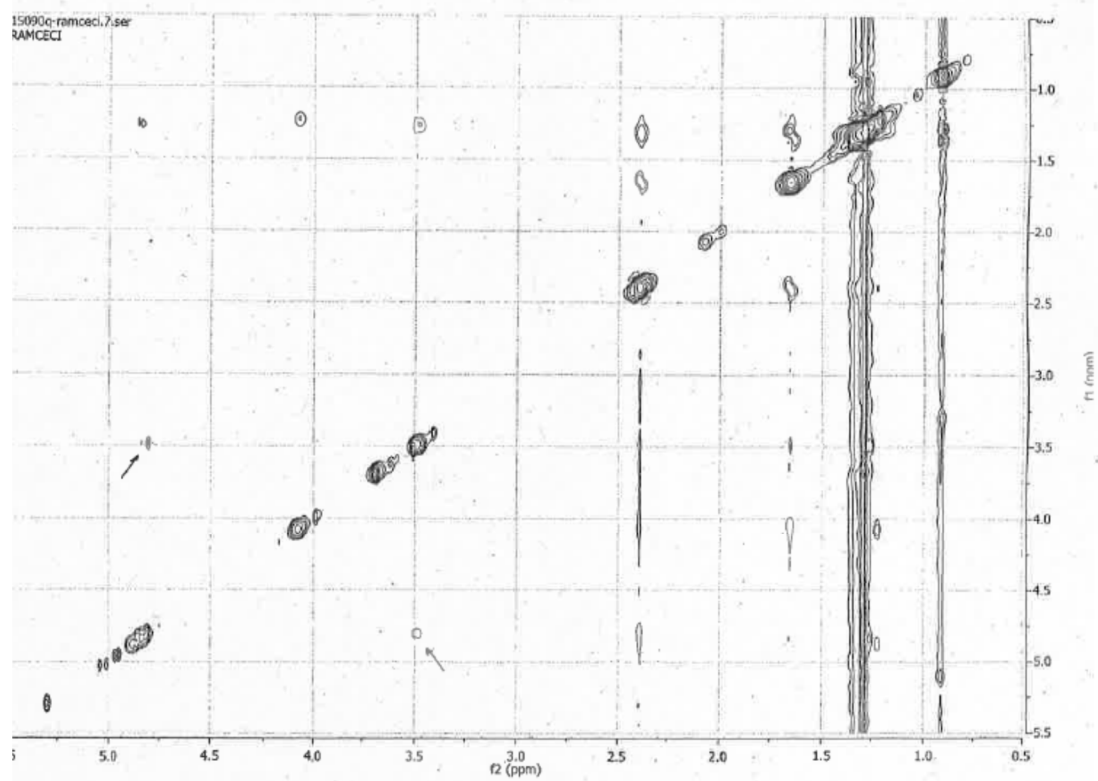
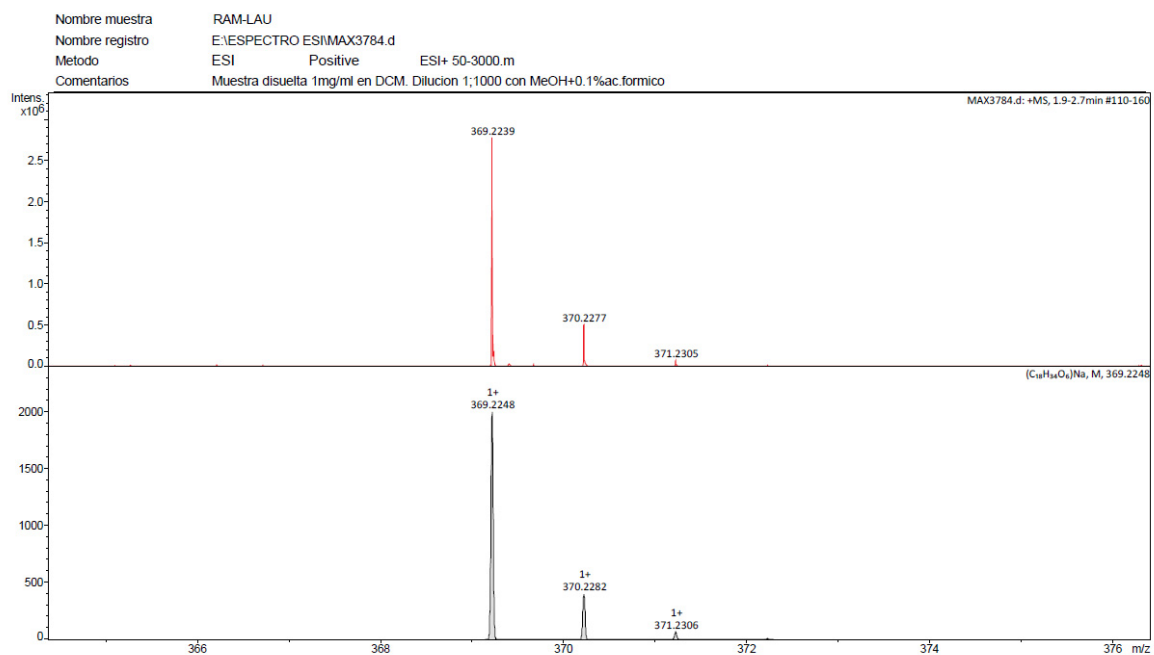
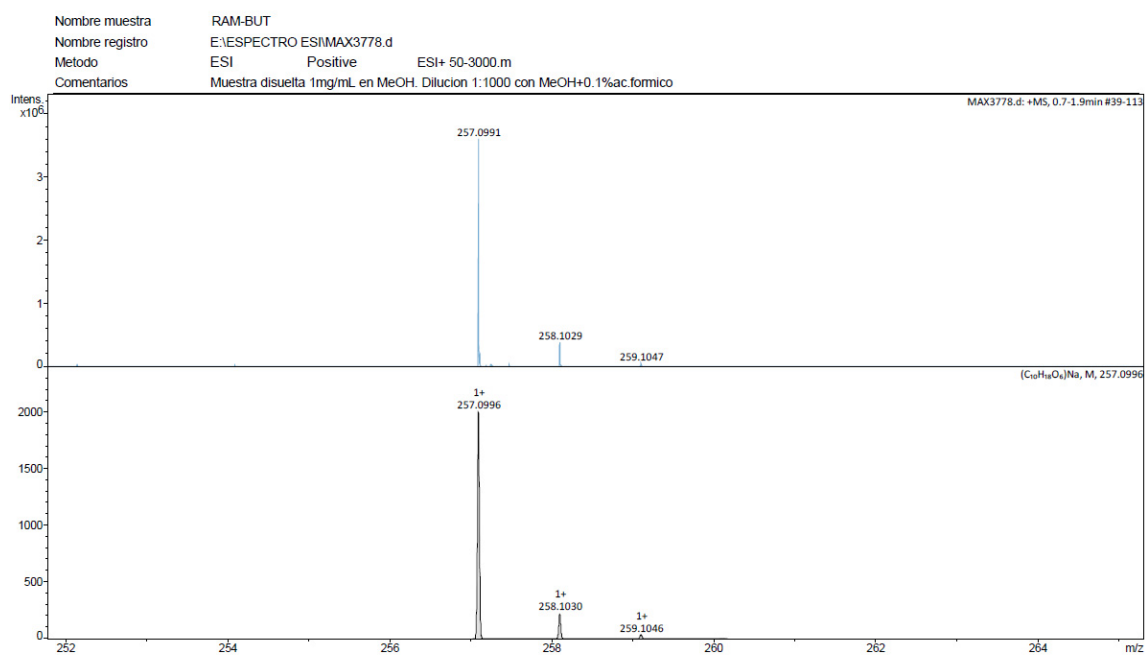


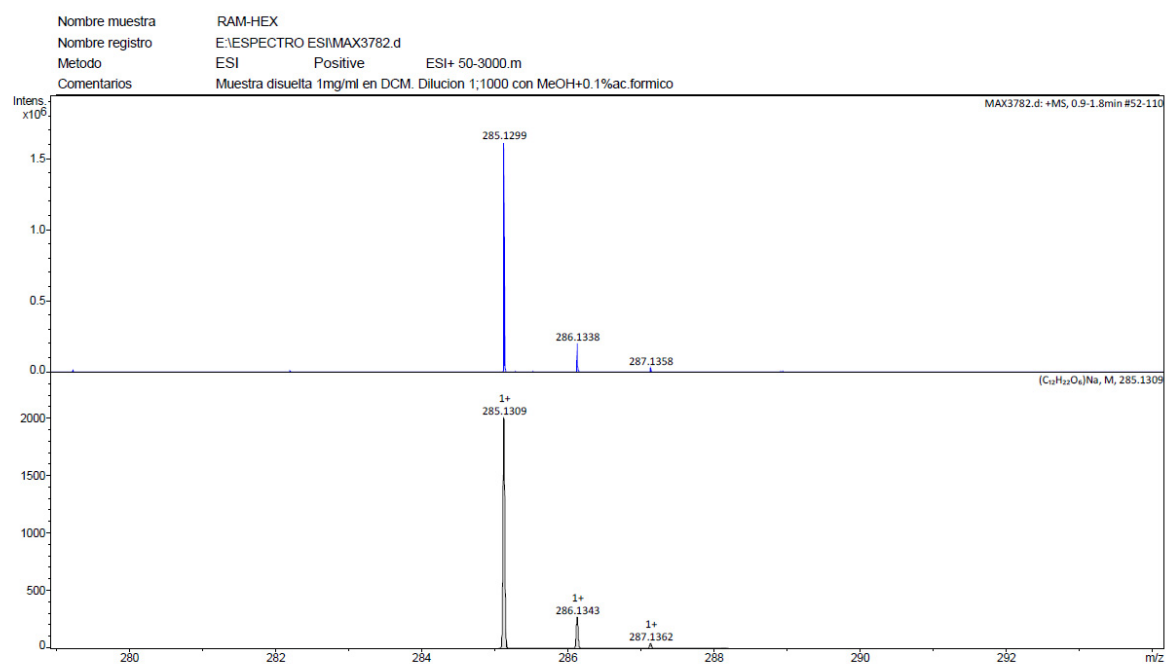
Figure S7. ROESY spectrum of 4-O-lauroylrhamnose (**1e**)



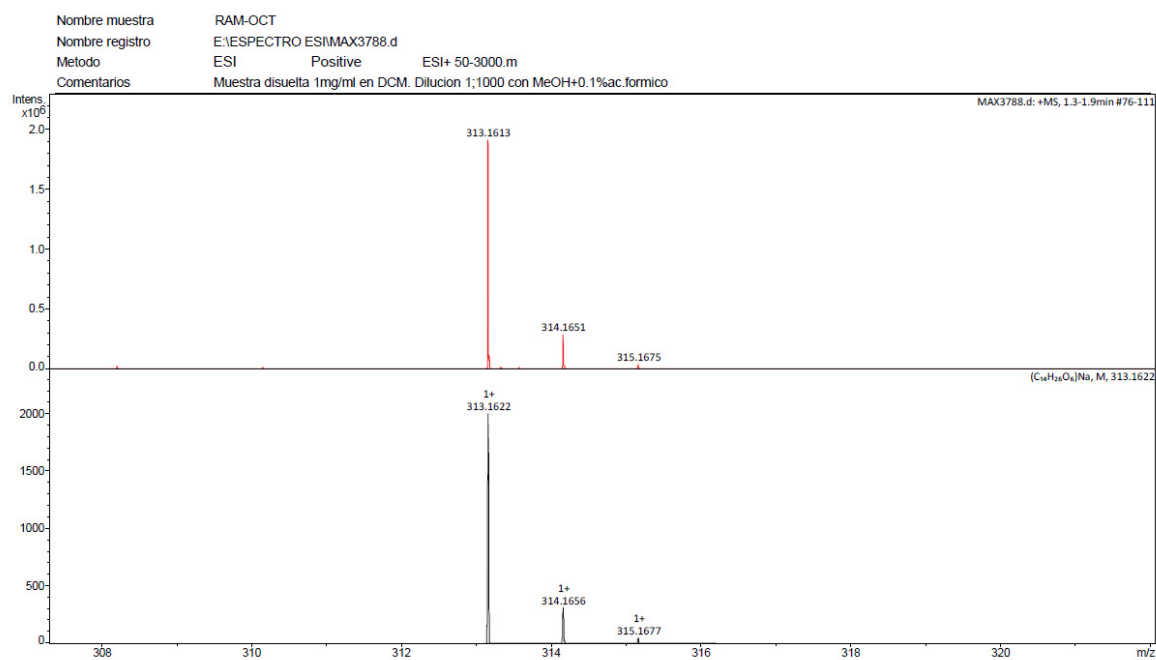
**Figure S8.** MS spectra for 4-*O*-lauroylrhhamnose (**1e**).



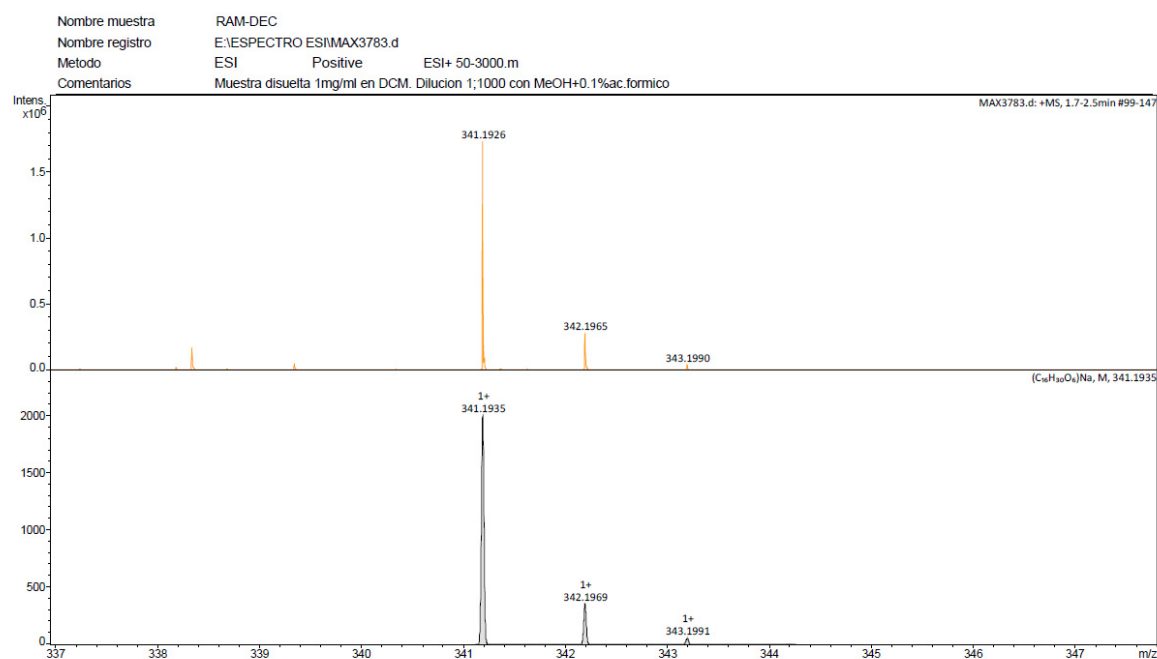
**Figure S9.** MS spectra for 4-*O*-butyrylrhhamnose (**1a**).



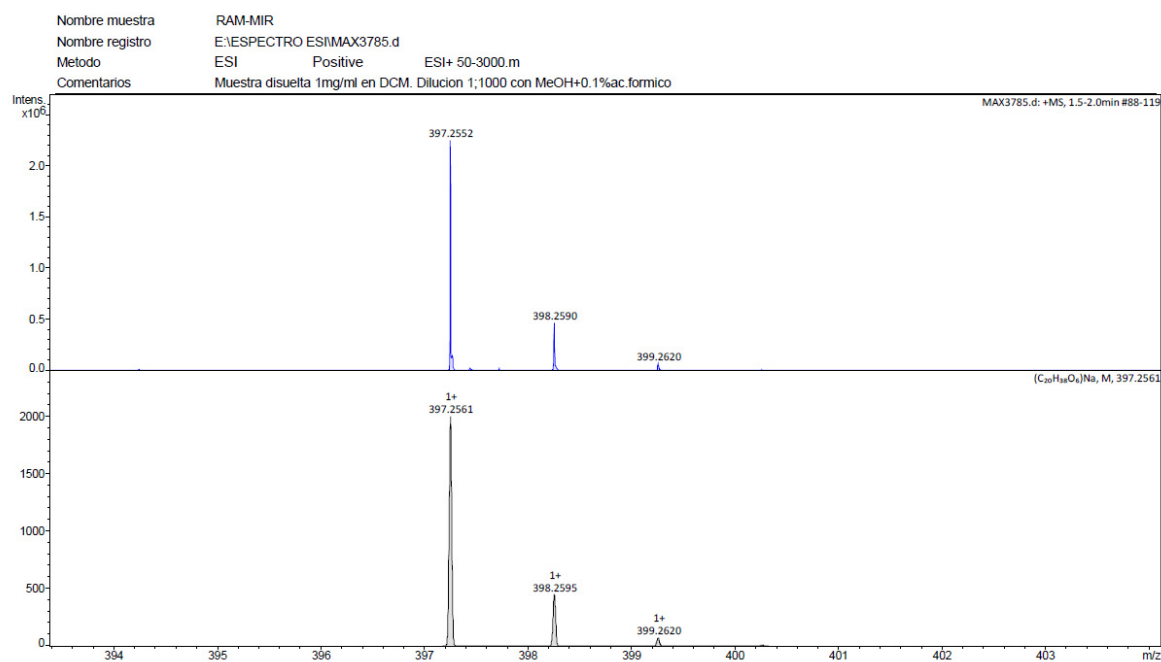
**Figure S10.** MS spectra for 4-*O*-hexanoylrhamnose (**1b**).



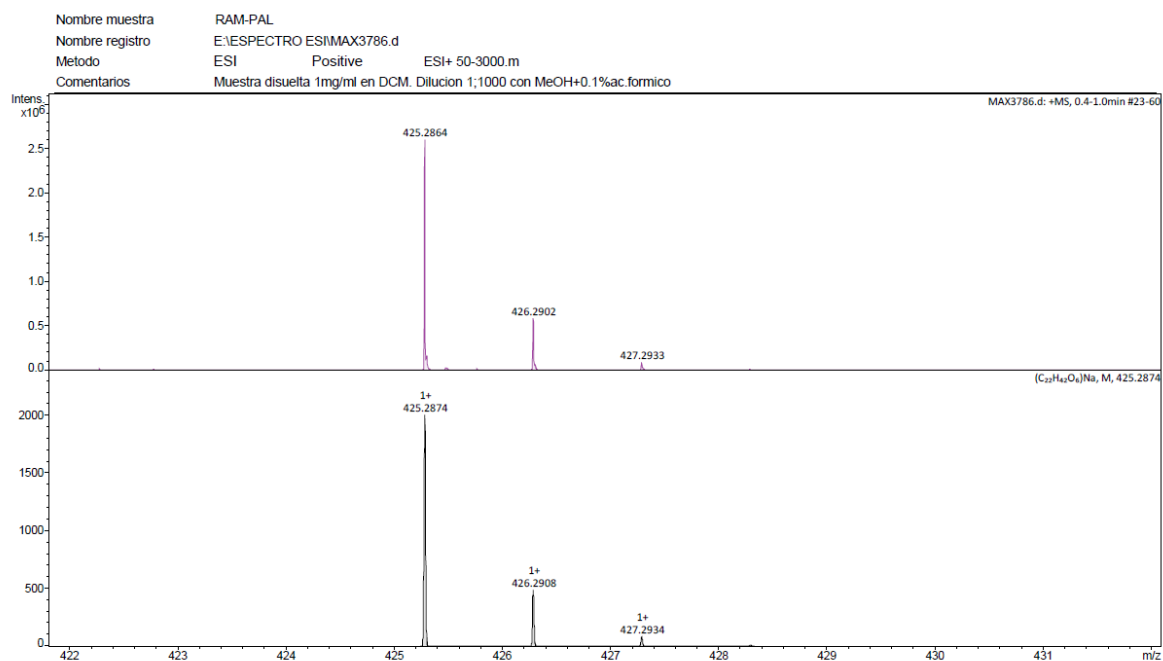
**Figure S11.** MS spectra for 4-*O*-octanoylrhamnose (**1c**).



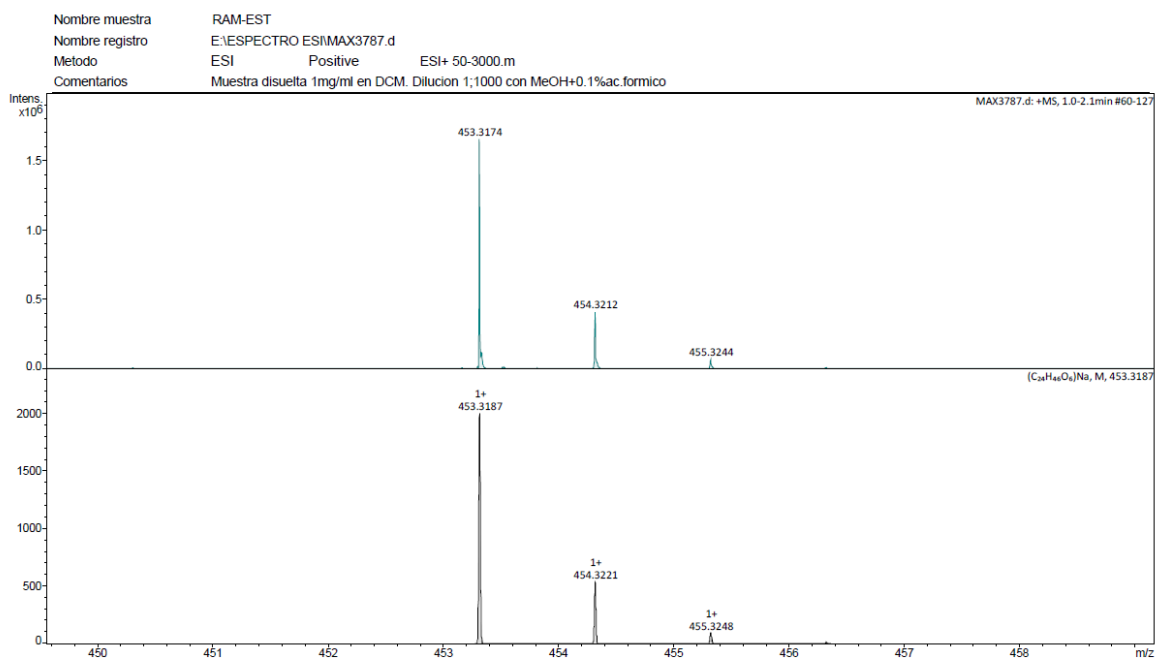
**Figure S12.** MS spectra for 4-*O*-decanoylrhamnose (**1d**).



**Figure S13.** MS spectra for 4-*O*-myristylrhamnose (**1f**).



**Figure S14.** MS spectra for 4-*O*-palmitoylrhamnose (**1g**).



**Figure S15.** MS spectra for 4-*O*-stearoylrhamnose (**1h**).