

Rational design of a peptidomimetic inhibitor of gelsolin amyloid aggregation

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Supplementary figures:

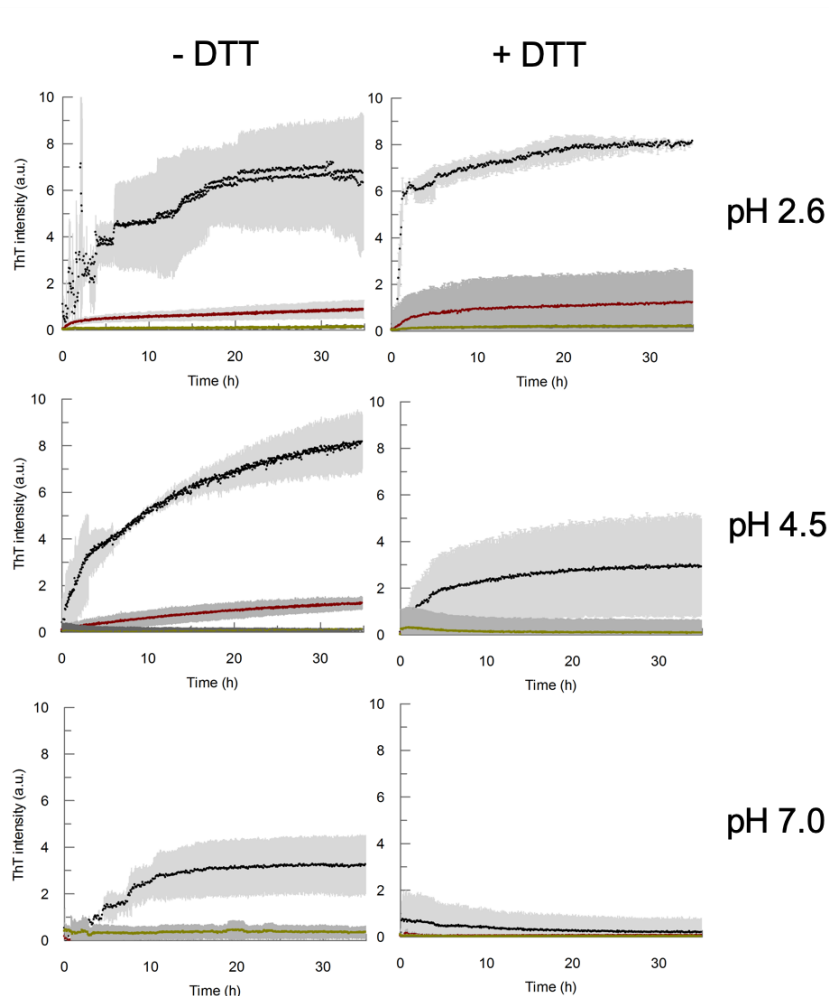


Figure S1: Representative curves of ThT fluorescence assays showing GAC₁₈₂₋₁₉₂ aggregation under different conditions. The concentration of GAC₁₈₂₋₁₉₂ was varied between 25(μ M (green trace) and 100 μ M (black trace), in 100 mM NaCl and 200 mM Sodium Acetate pH 2.6, or 200 mM Sodium Citrate pH 4.5, or 200 mM HEPES pH 7.0; Both in the presence and absence of 1 mM DTT.

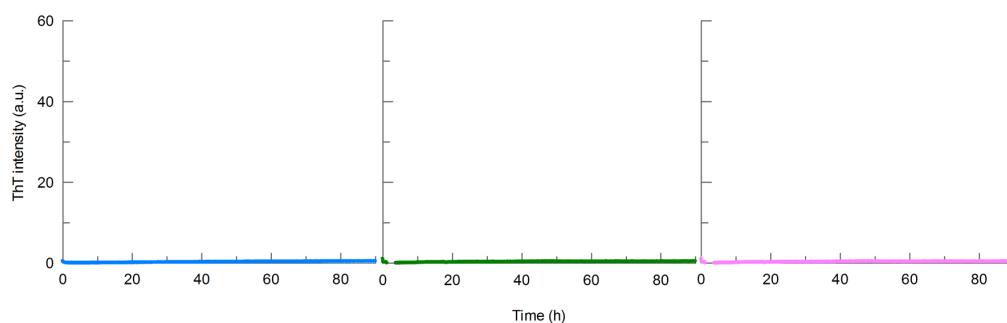


Figure S2: ThT fluorescence of the LB peptidomimetics (LB-5 blue trace; LB-6 green; LB-7 magenta) under the same conditions used for GAC₁₈₂₋₁₉₂ aggregation assay and at the highest concentration tested. Y axis scales as in figure 2.

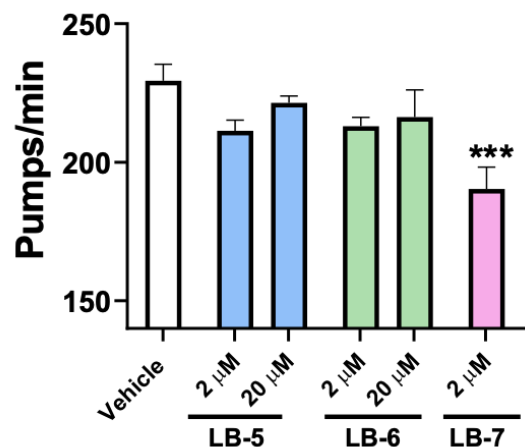
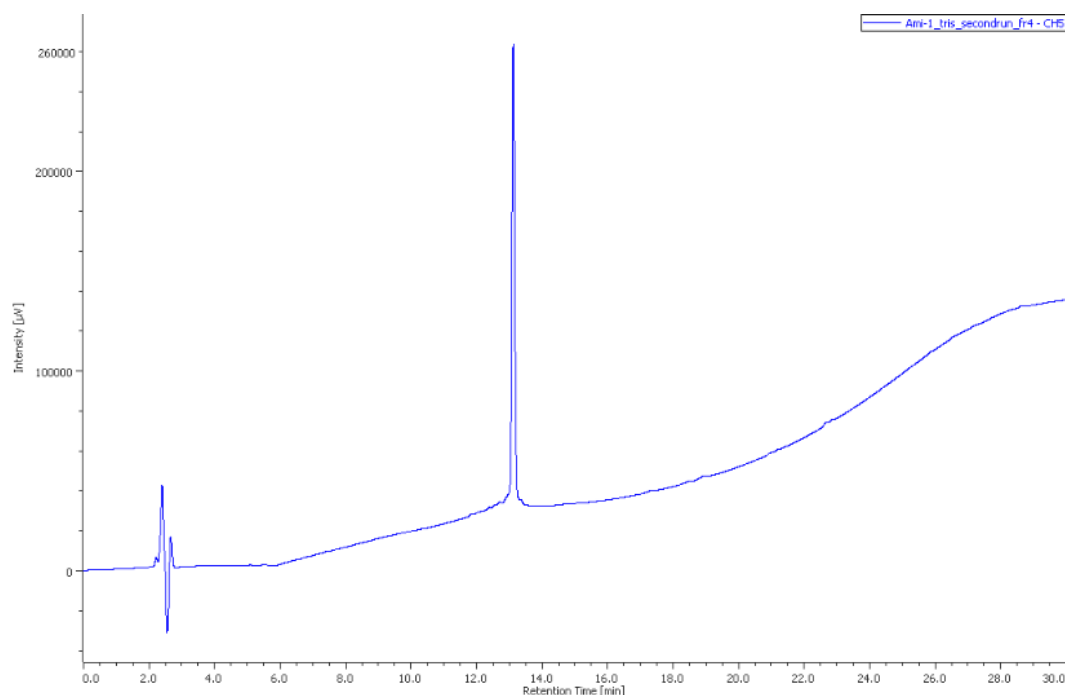


Figure S3: *Effect of peptidomimetics on the pharyngeal function of C. elegans.* LBs were administered to worms at 2 or 20 μM in 200 mM sodium citrate, pH 4.5, containing 100 mM NaCl (50 worms/50 μL). Control worms were treated with 100 mM sodium citrate, pH 4.5 alone (50 worms/50 μL) (Vehicle). The pharyngeal activity was determined 24 h after treatment. Data are mean \pm SE ($N=10$). *** $p<0.001$ vs Vehicle, one-way ANOVA, and Bonferroni's post hoc analysis.

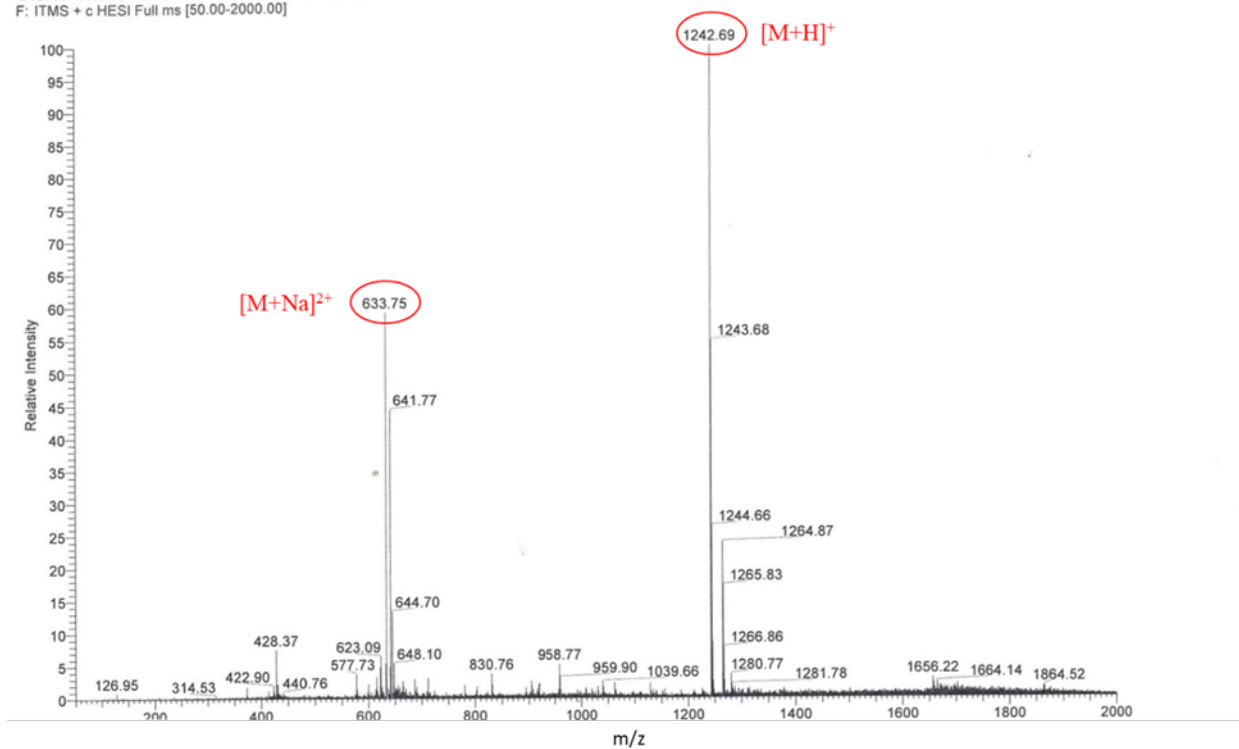
GAC₁₈₂₋₁₉₂

HPLC chromatogram



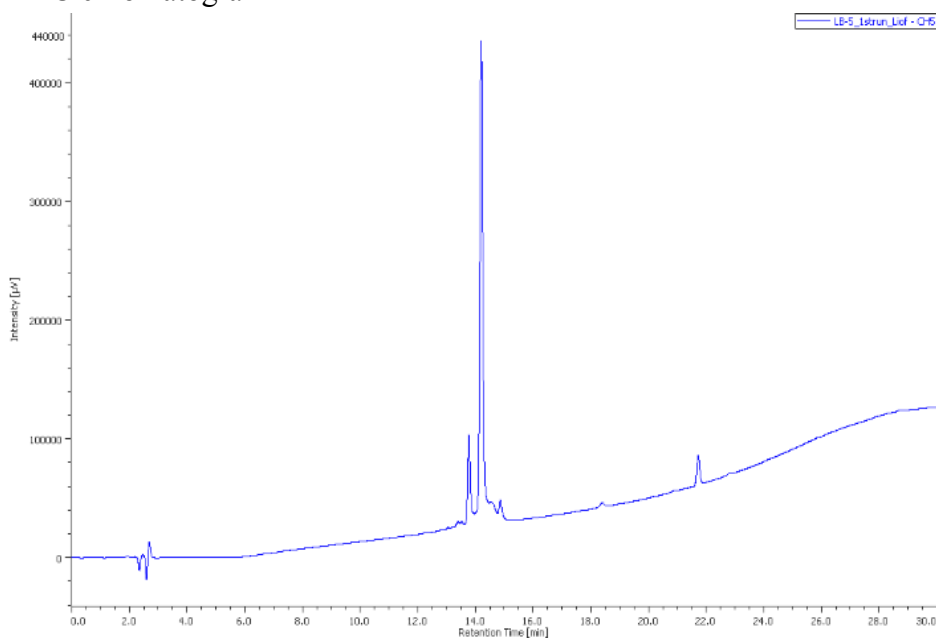
ESI/MS spectrum

#15799 AV: 10 IT: 5.008 ST: 0.73 uS: 3 NL: 5.01E4
F: ITMS + c HESI Full ms [50.00-2000.00]

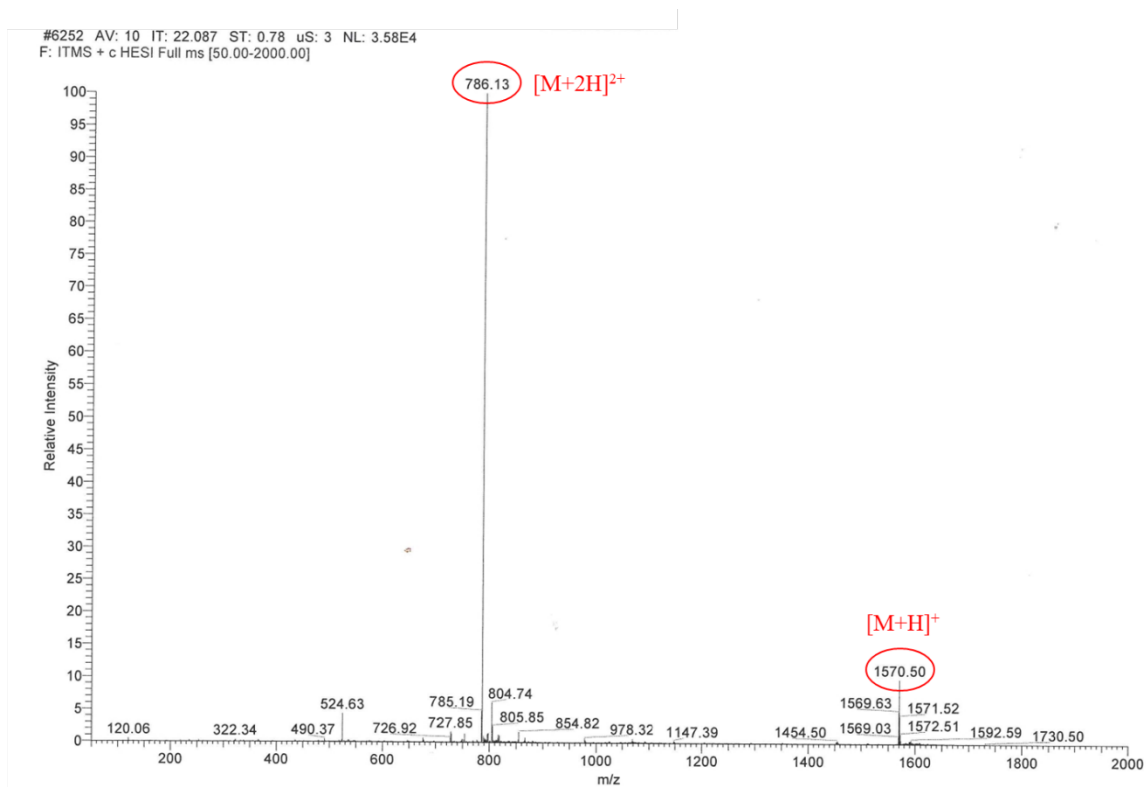


LB-5

HPLC chromatogram

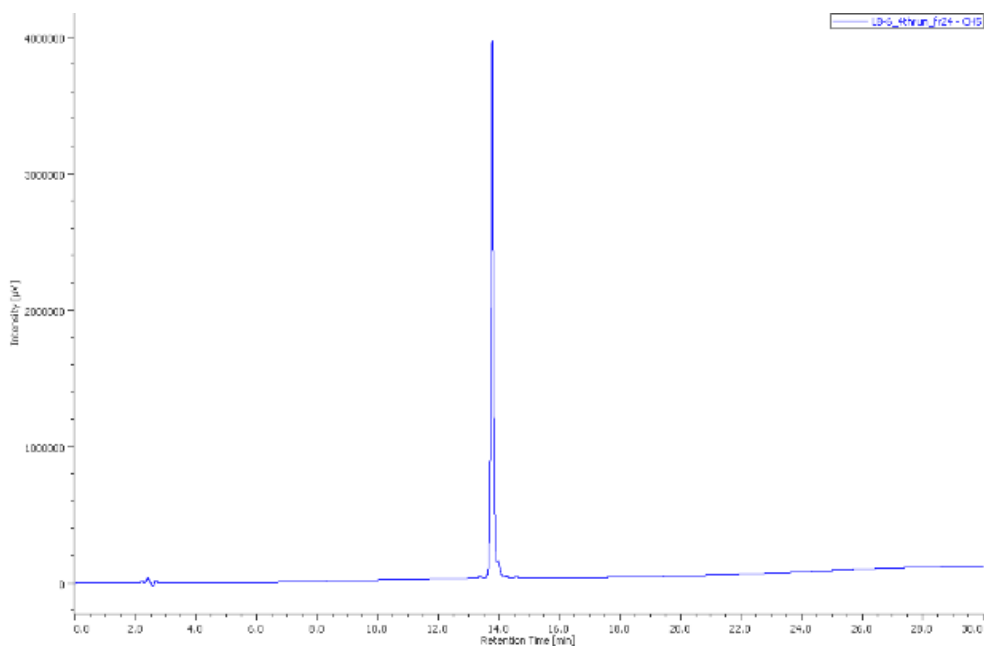


ESI/MS spectrum

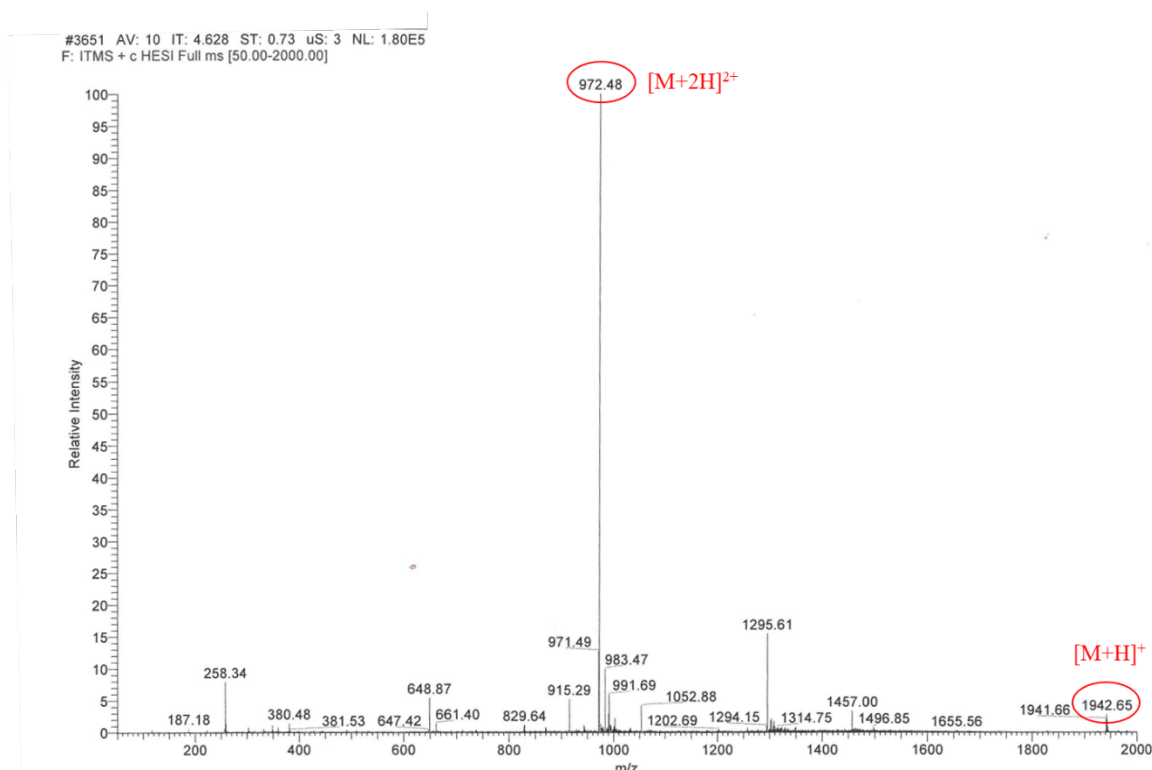


LB-6

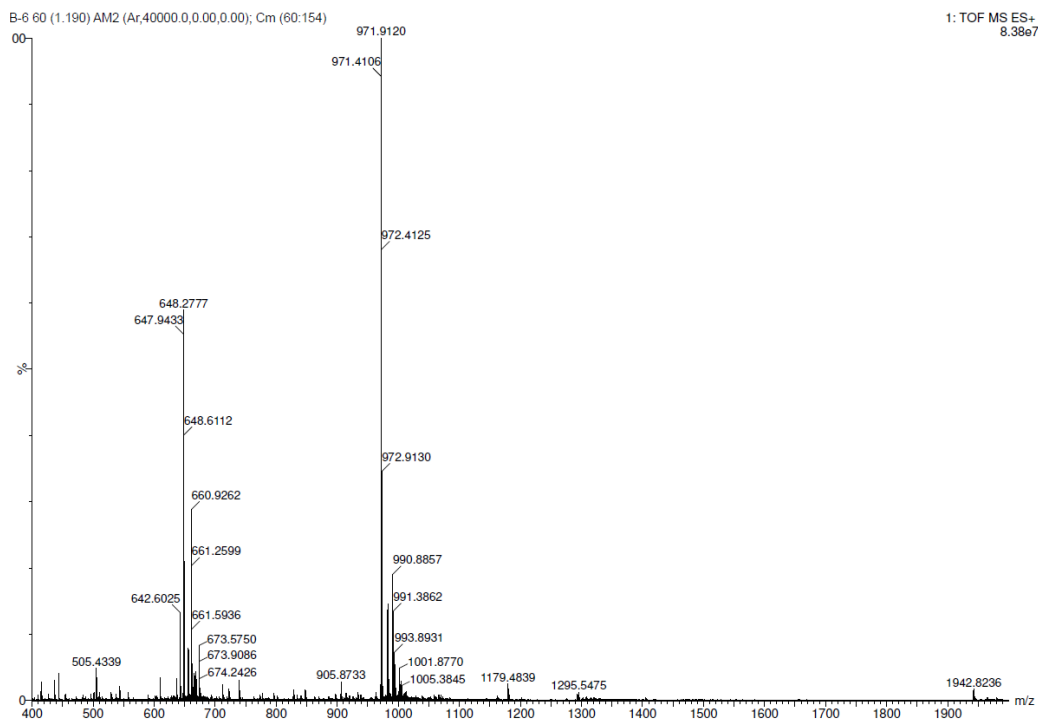
HPLC chromatogram



ESI/MS spectrum

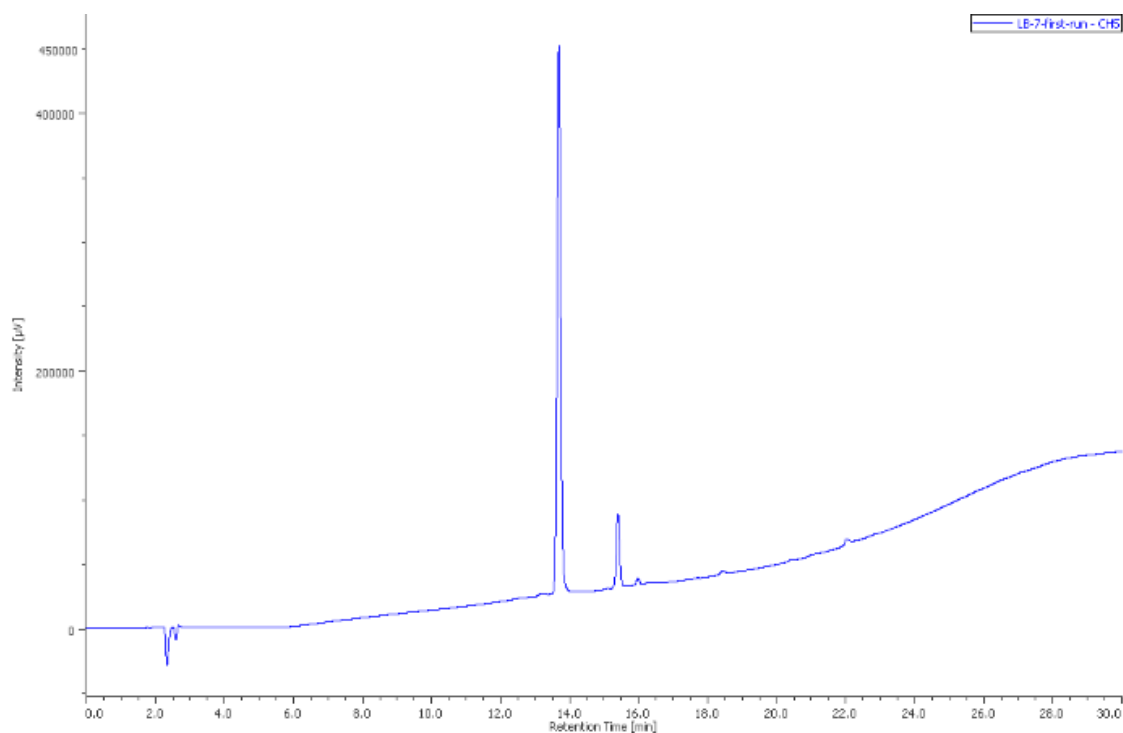


HRMS



LB-7

HPLC chromatogram



ESI/MS spectrum

#576 AV: 9 IT: 1.889 ST: 0.71 uS: 3 NL: 9.55E4
F: ITMS + c HESI Full ms [110.00-2000.00]

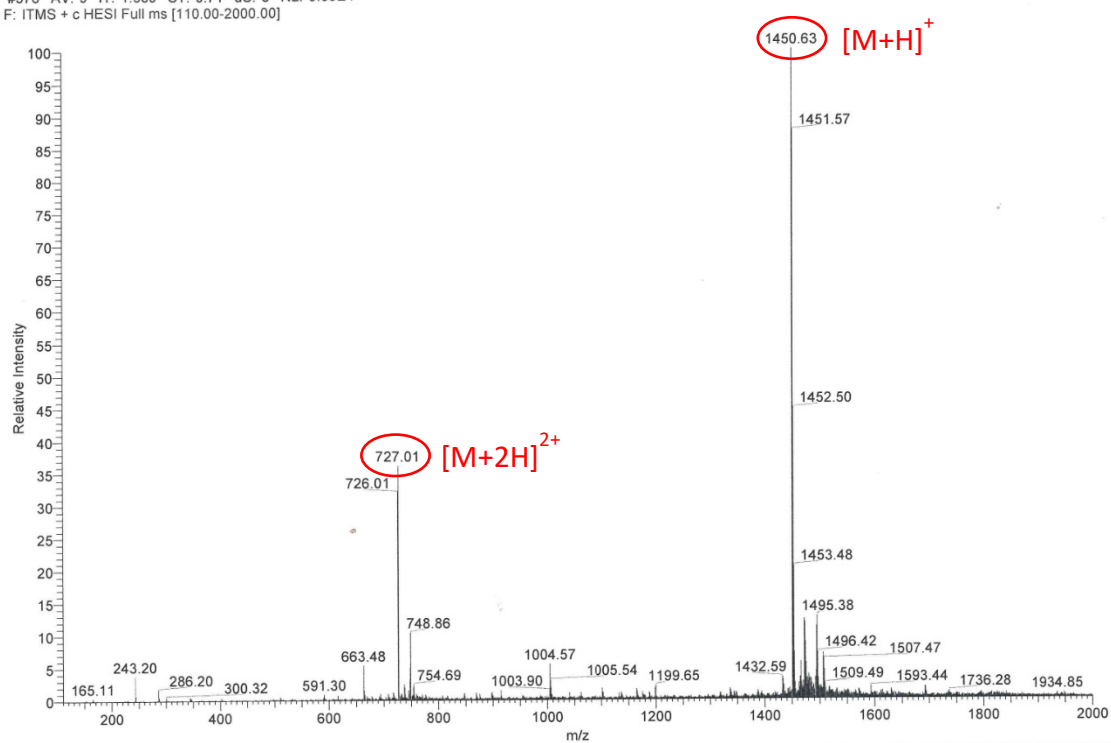


Figure S4: RP-HPLC chromatograms, GC-MS and ESI spectra of purified $GAC_{182-192}$, LB5, LB6 and LB7. HRMS of LB6.