

Figure S1. TEM images of PA1 (A), PA3 (B), PA4 (C), and PA5 (D). All PAs form nanofibers as previously described.

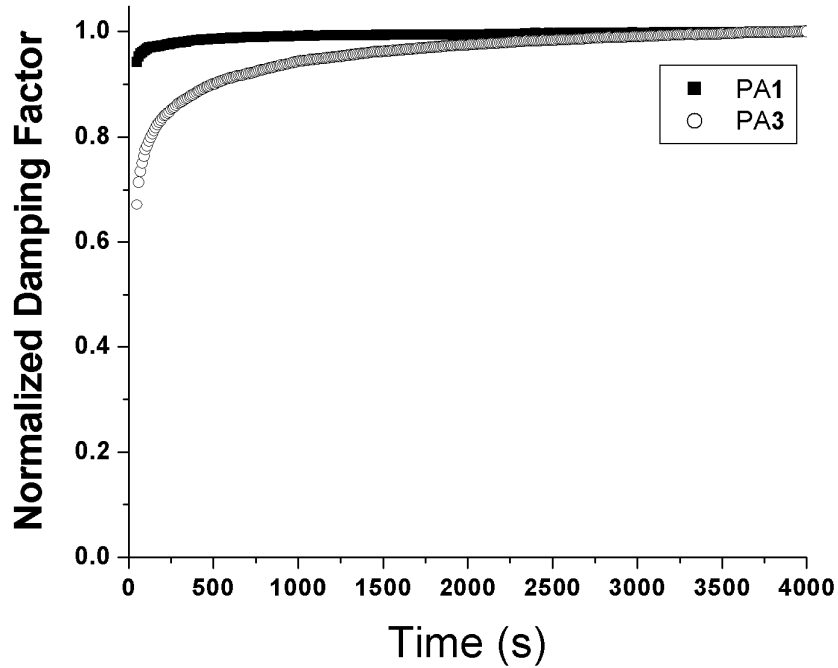
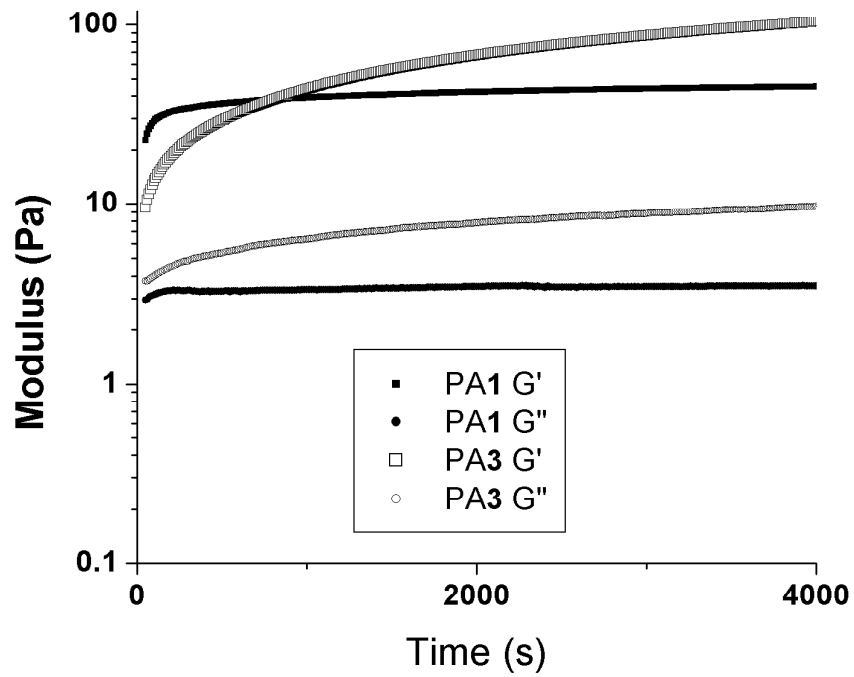


Figure S2. Development of storage and loss moduli over time for PAs 1 and 3. Note the slower development in PA3. The behavior of PA2 is intermediate between the two and ends at a lower final modulus. Its traces are omitted for clarity.

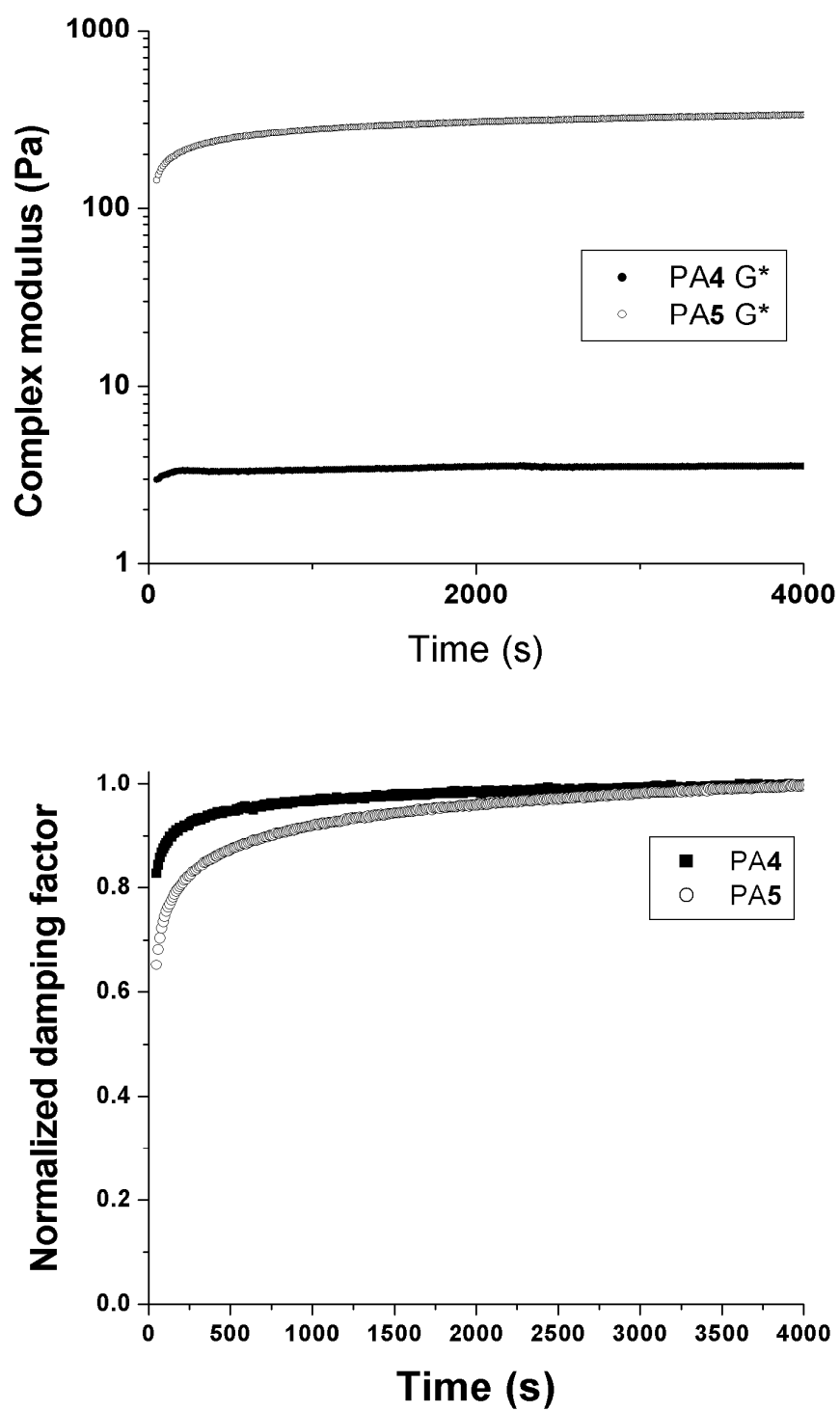
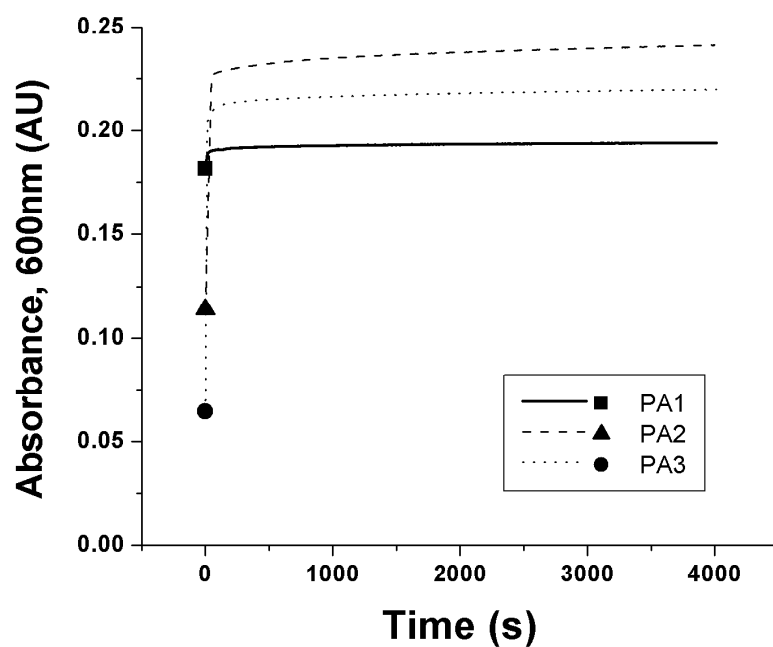


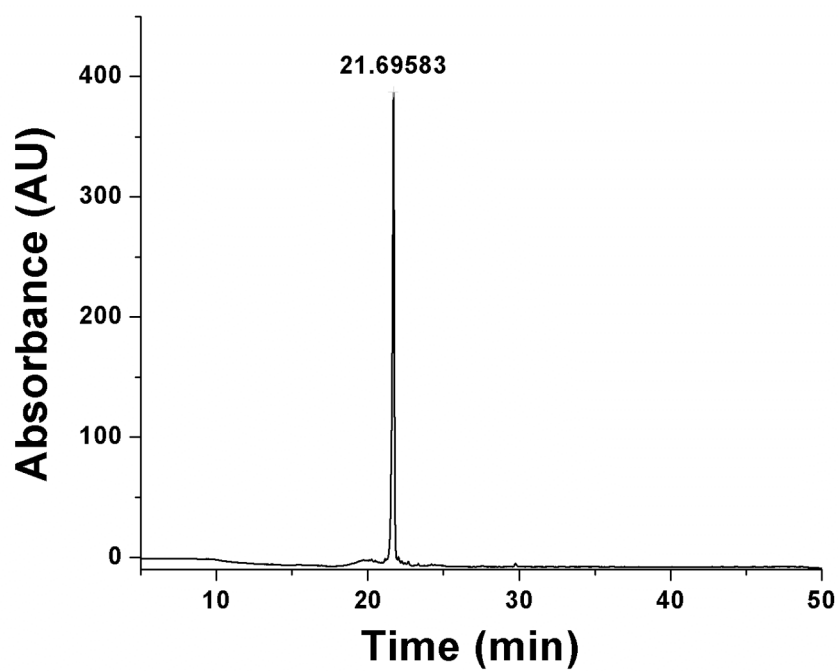
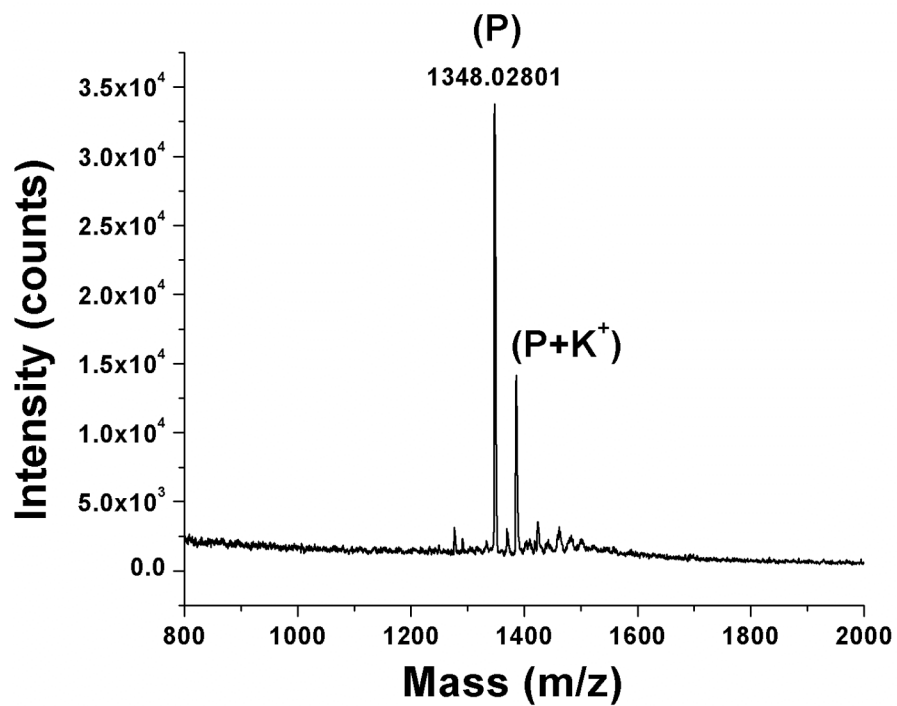
Figure S3. Complex modulus (A) and normalized damping factor (B) for RGD-bearing PAs.

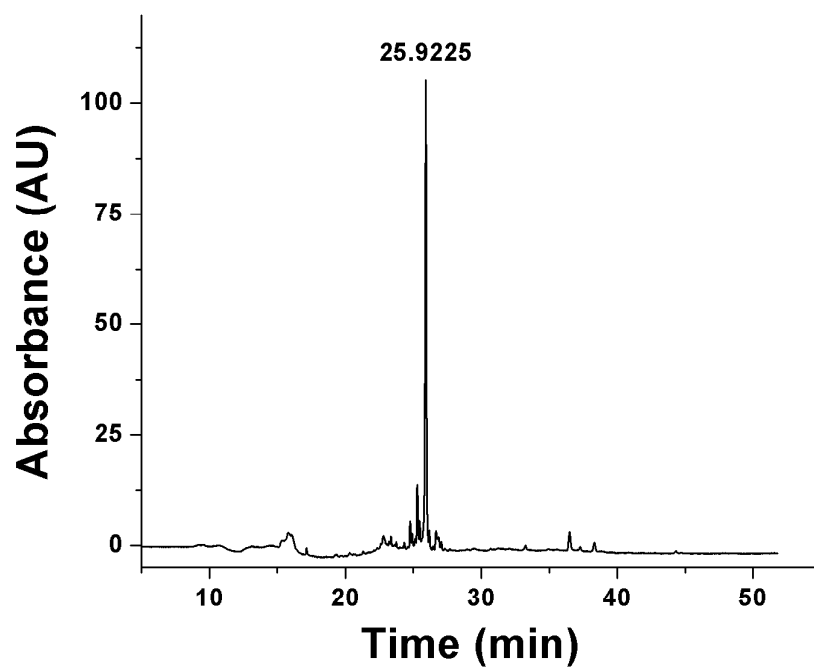
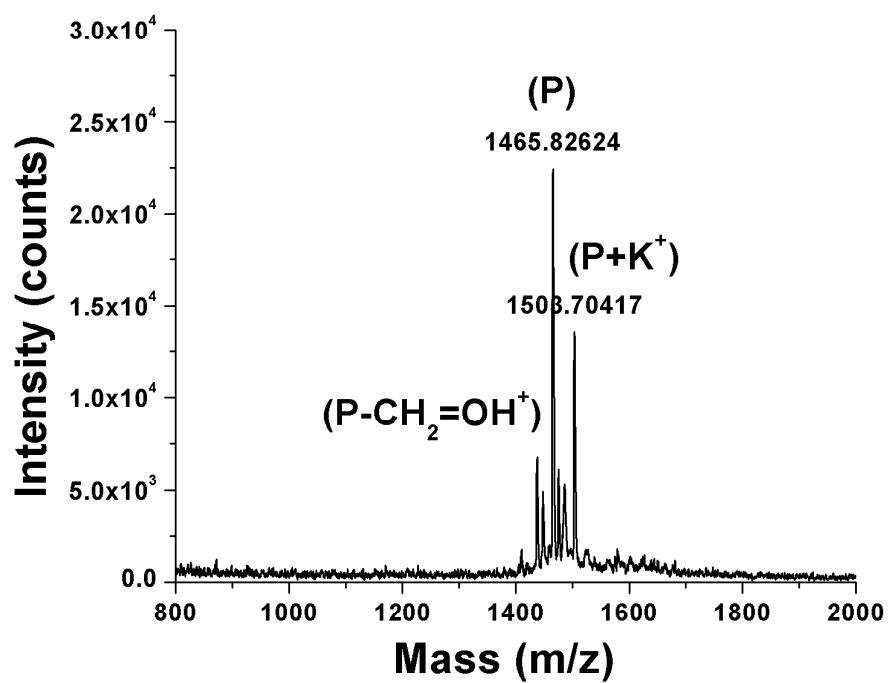
**Figure S4.** Zeta potential series. The zeta potentials of PA1 and PA3 are negative and similar. The circled data points were taken with HBSS and the squared data points with DMEM.

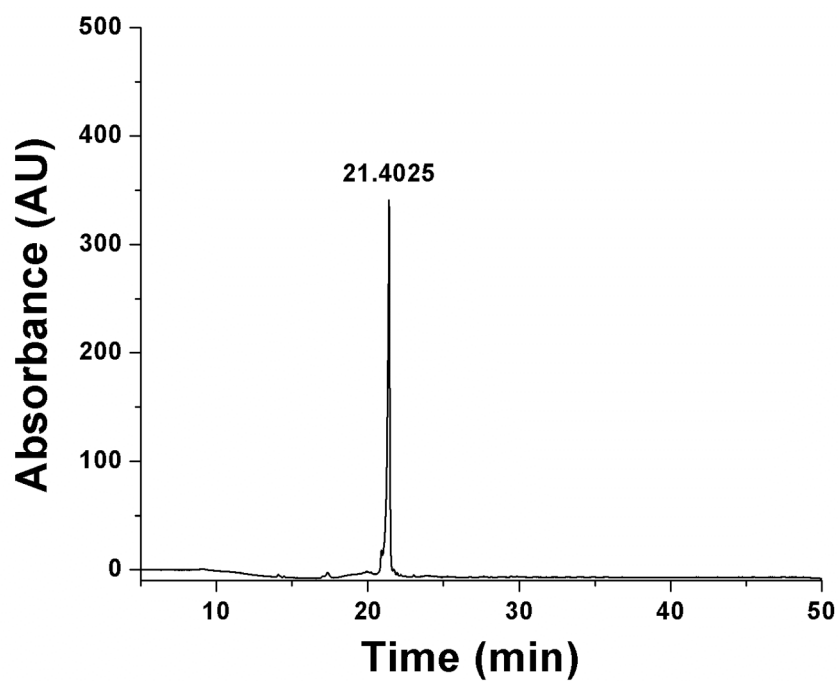
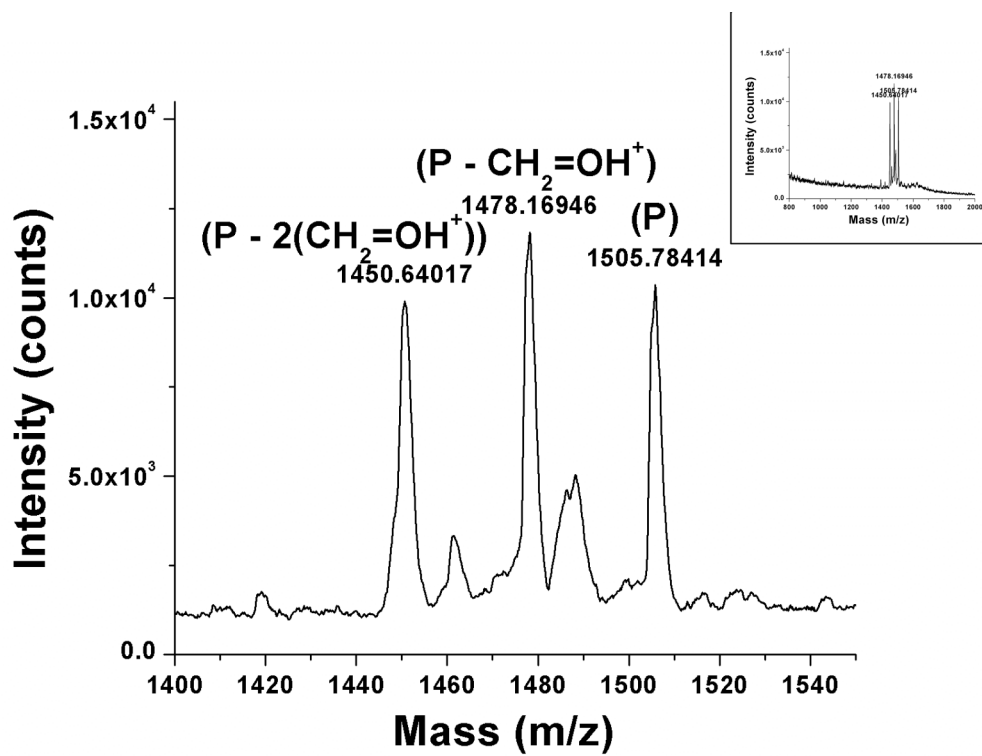


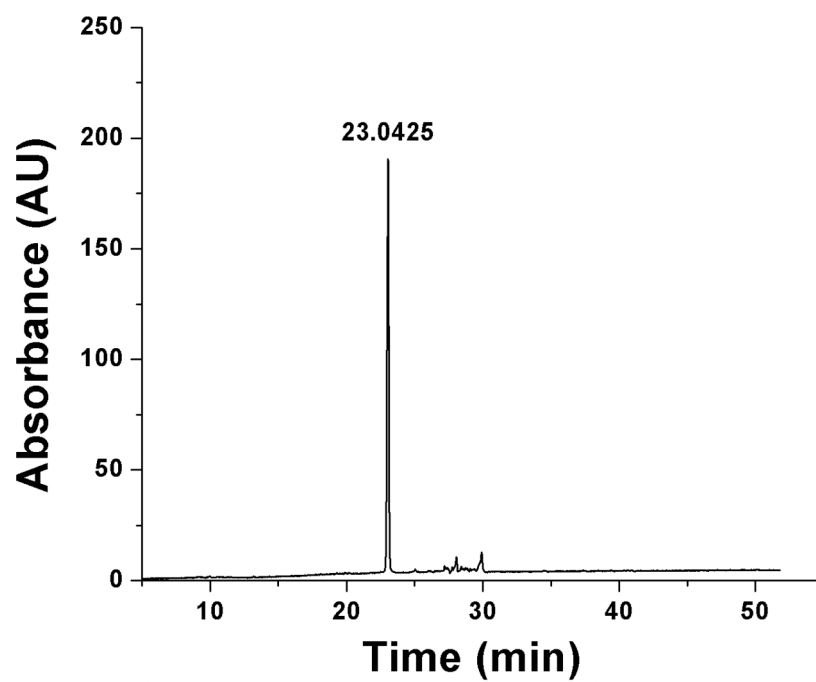
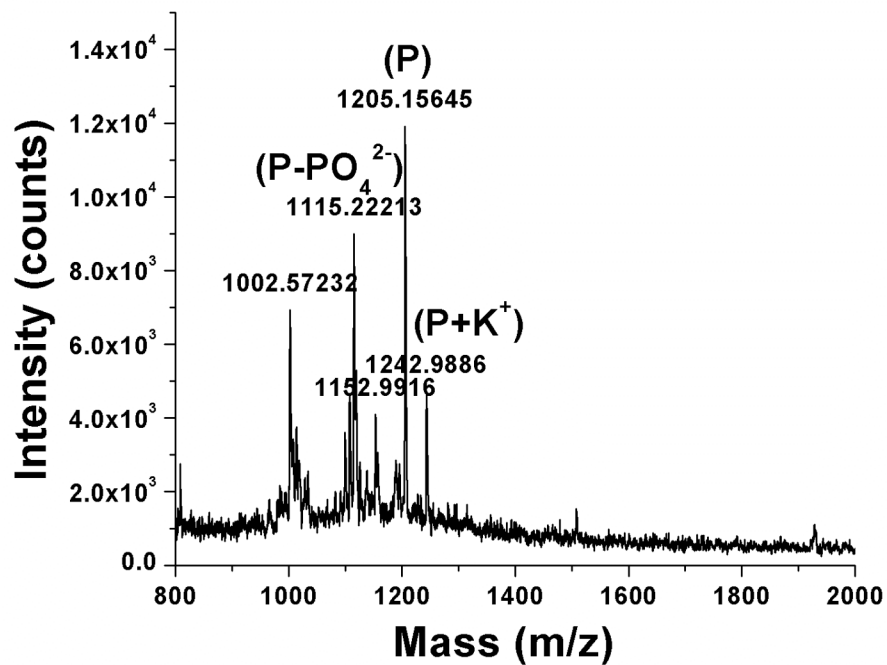
**Figure S5.** Turbidity measurements for PAs 1-3. Initial measurements are shown by symbols. All PAs show non-zero turbidity even before the addition of HBSS.

## Mass spectra and HPLC of PAs

*PA1*

*PA2*

*PA3*

*PA4*



*PA5*