

*Supplemental Information*

**Impact of structurally modifying hyaluronic acid  
on CD44 interaction**

*D. Bhattacharya,<sup>a</sup> D. Svehkarev,<sup>a</sup> J. J. Soucek,<sup>a</sup> T. K. Hill,<sup>a</sup> M. A. Taylor,<sup>b</sup> A. Natarajan<sup>b,c</sup> and*

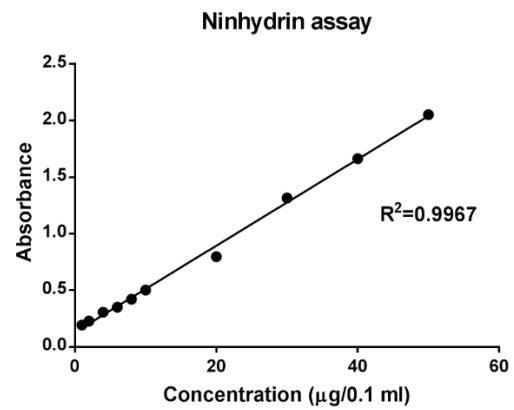
*A. M. Mohs<sup>a,c,d\*</sup>*

a. Department of Pharmaceutical Sciences, University of Nebraska Medical Center, Omaha, NE 68198-6858, USA.

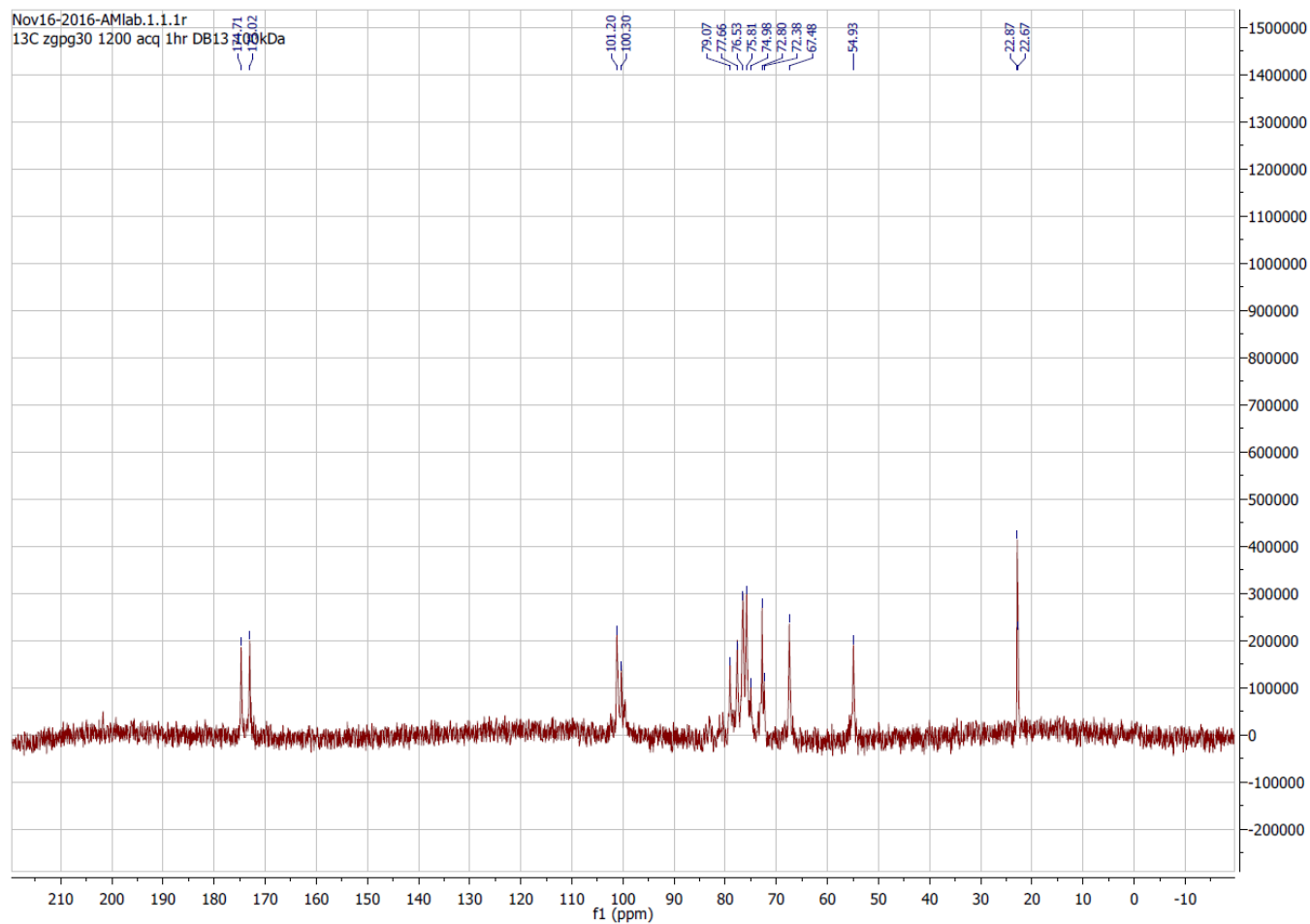
b. Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Omaha, NE 68198-6858, USA.

c. Fred and Pamela Buffett Cancer Center, University of Nebraska Medical Center, Omaha, NE 68198-6858, USA.

d. Biochemistry and Molecular Biology, University of Nebraska Medical Center, Omaha, NE 68198-6858, USA



**Figure S1.** Standard curve for determination of degree of deacetylation.



**Figure S2**  $^{13}\text{C}$  NMR spectra of sulfated HA

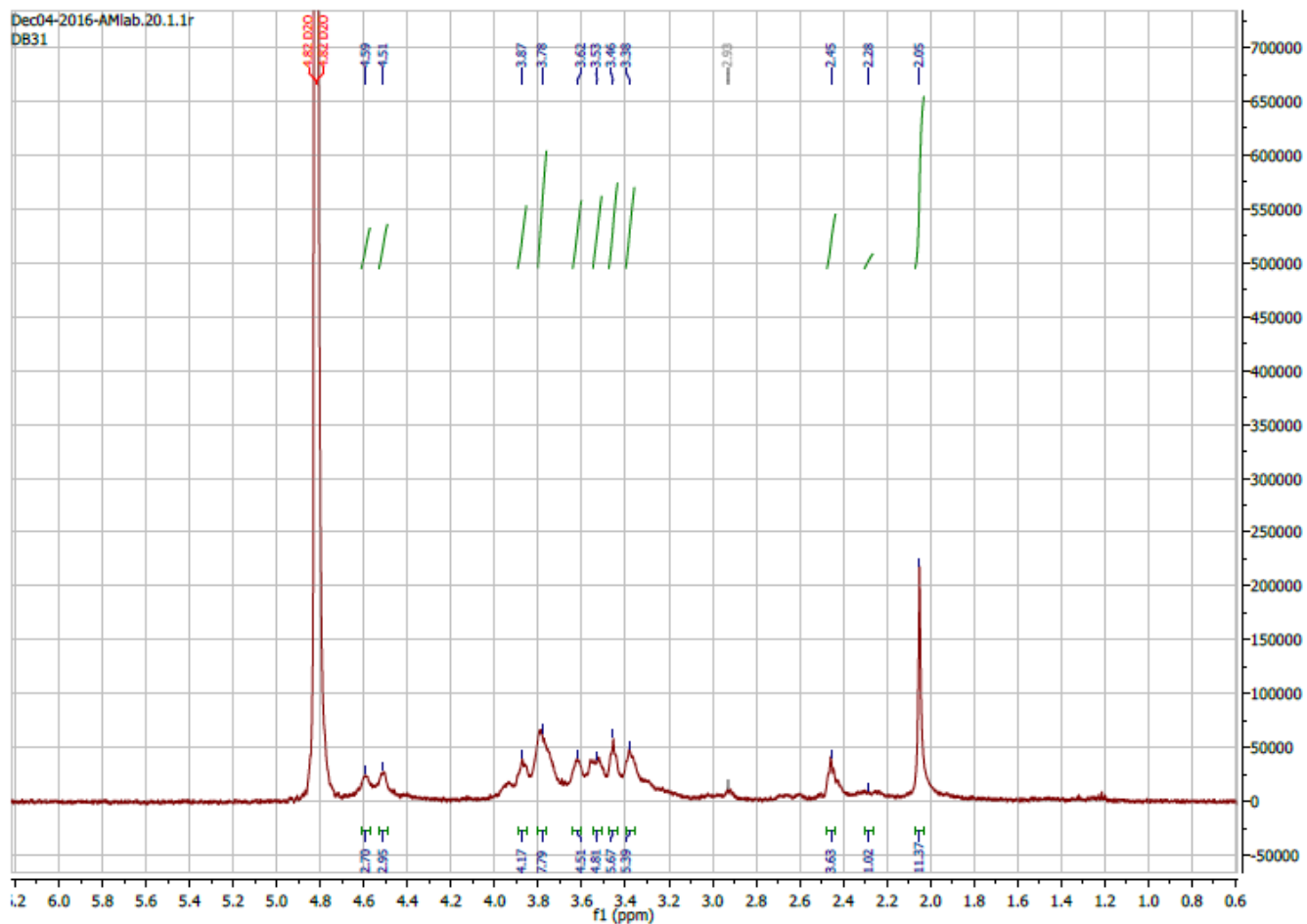


Figure S3.  $^1\text{H}$  NMR sulfated HA

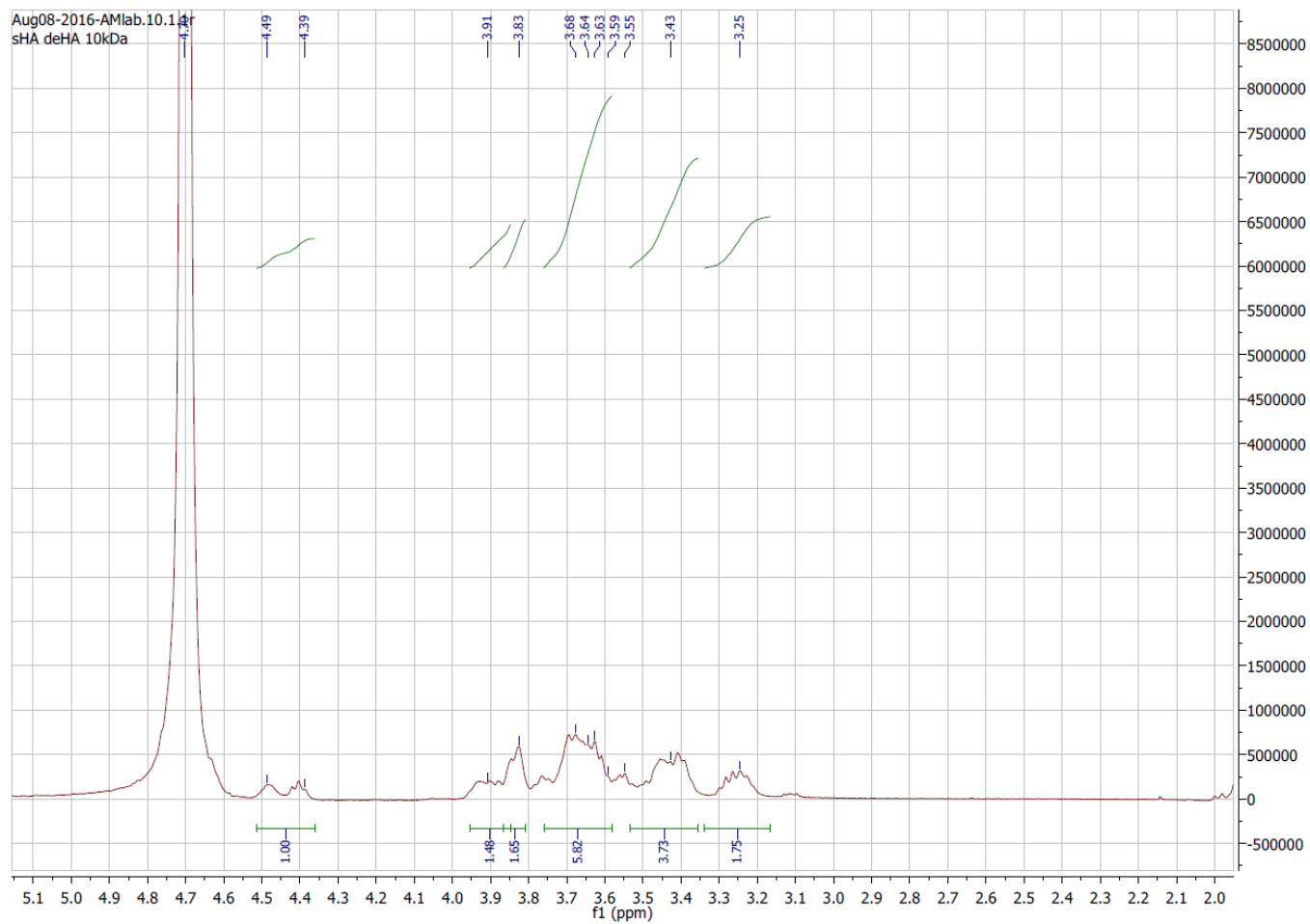
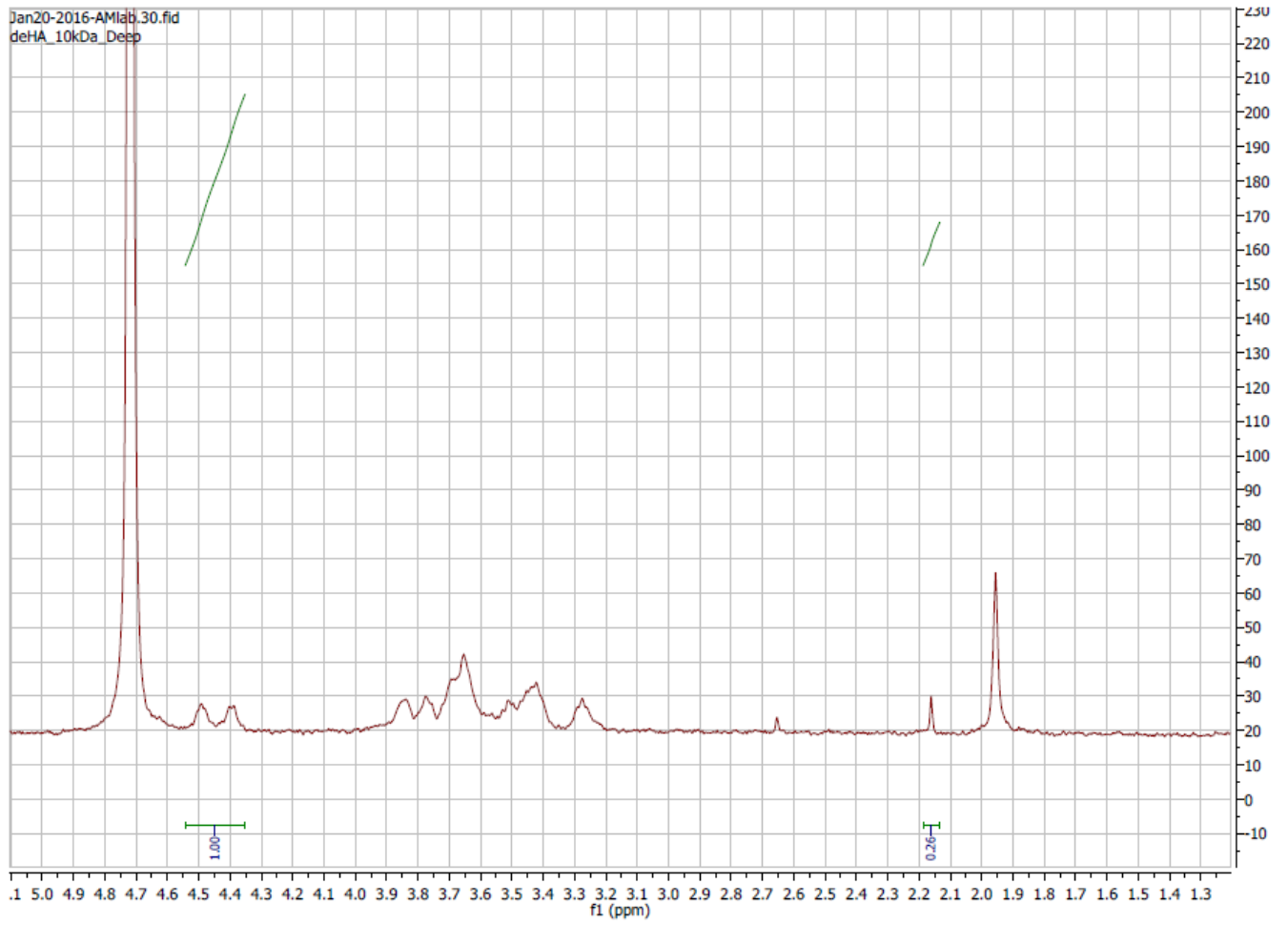
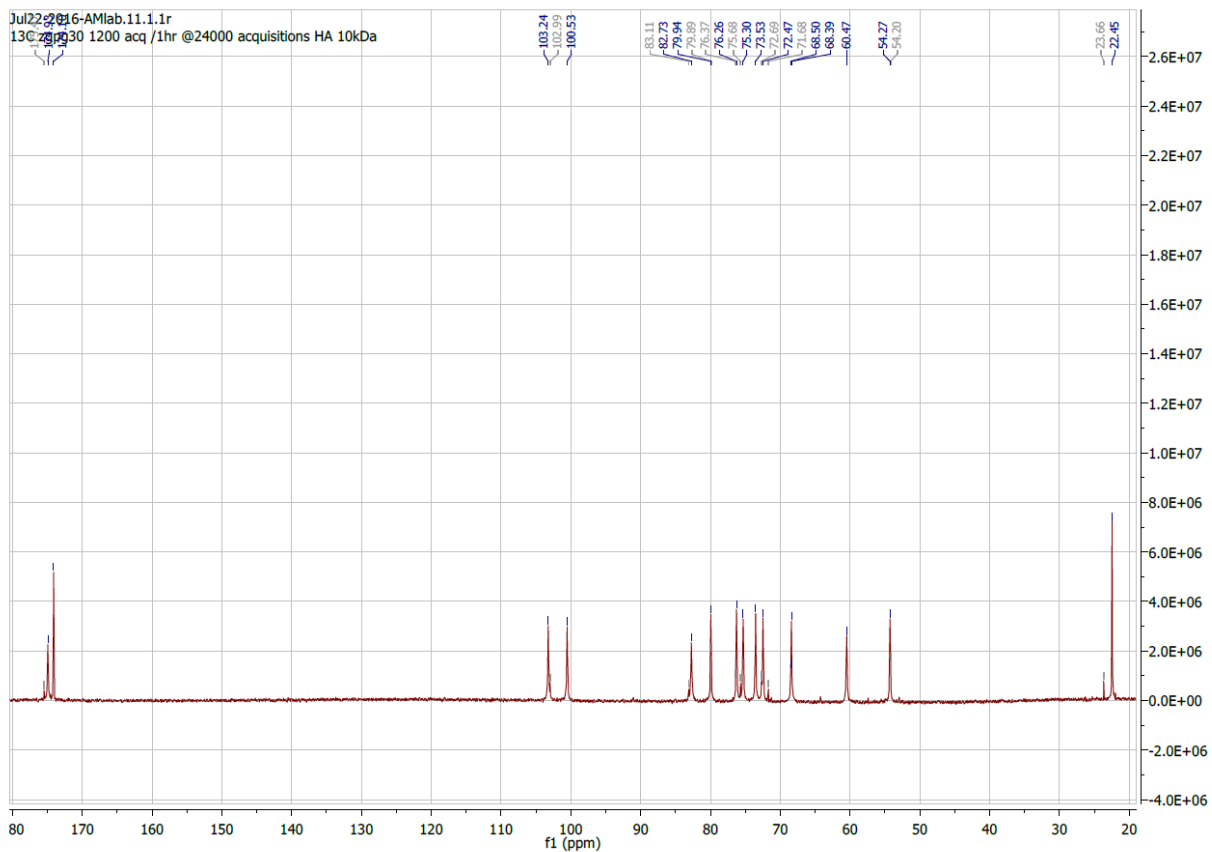


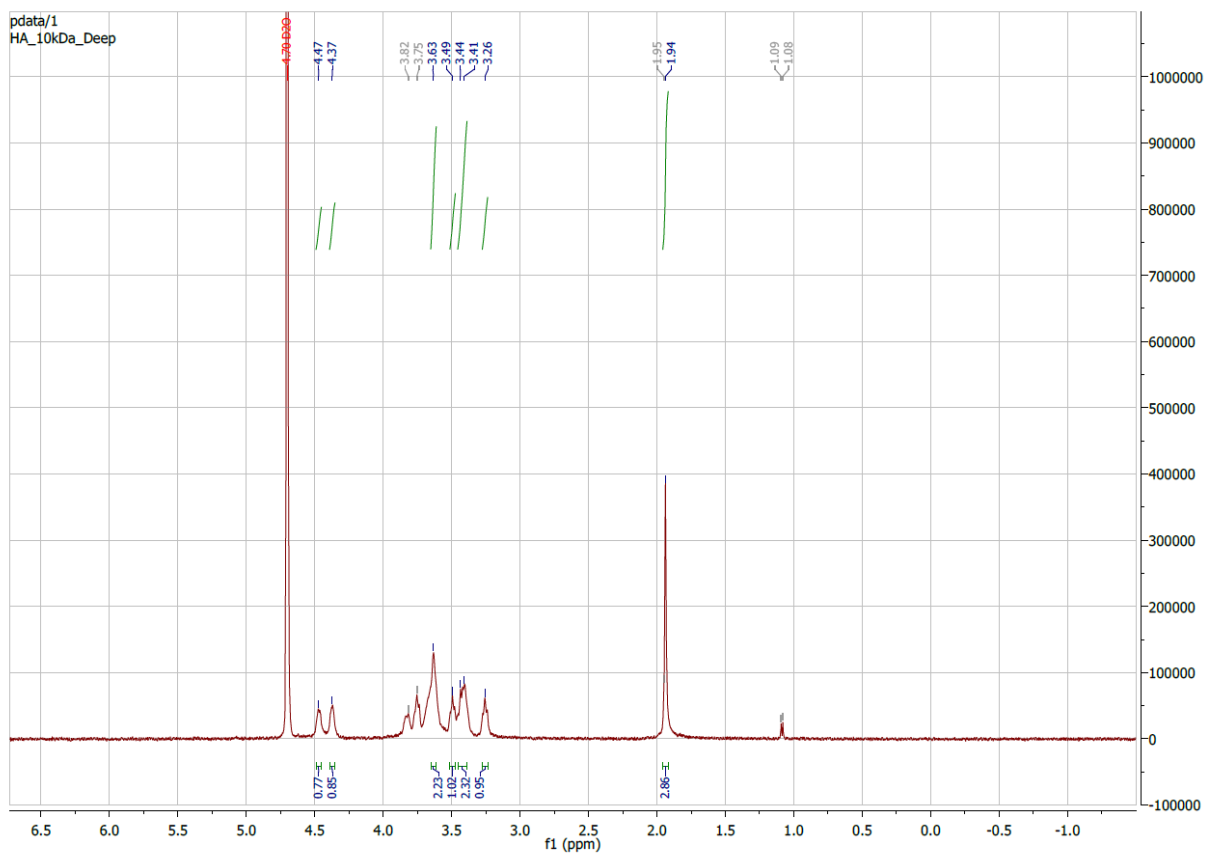
Figure S4. <sup>1</sup>H NMR of s-deHA



**Figure S5.**  $^1\text{H}$  NMR of deacetylated HA



**Figure S6:** <sup>13</sup>C NMR spectra of HA



**Figure S7:** <sup>1</sup>H NMR spectra of HA.

	Elemental analysis			Degree of substitution of sulfate
	S	C	H	
<b>Native</b>	-	25.25	4.08	-
<b>Sulfated</b>	7.23	27.45	4.9	1.3

**Table S1.** Elemental analysis and degree of substitution of native and sulfated HA.