

Supplementary Materials: Novel polysaccharide-protein systems as a fundamental base for anti-amyloid pharmaceutical applications

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CD spectra of native HEWL and soluble fraction of HEWL fibrils

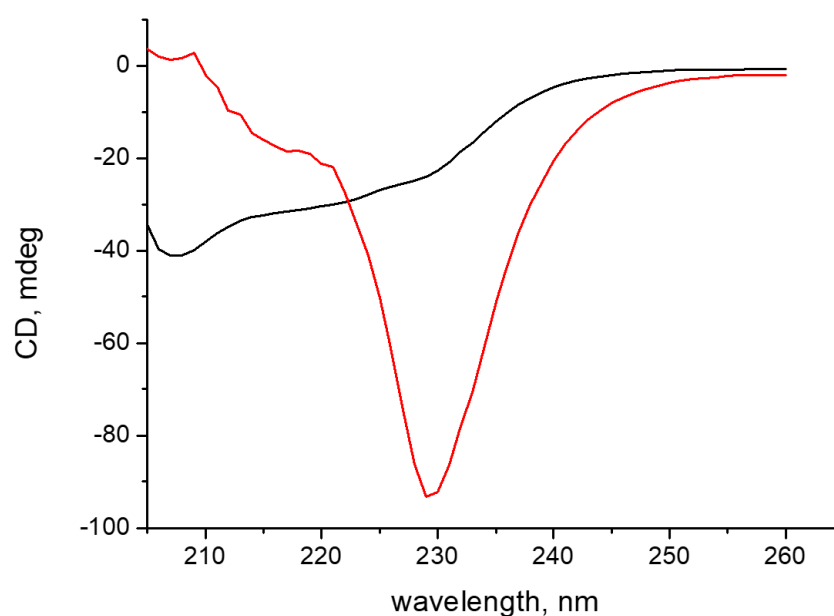


Figure S1. CD spectra of native HEWL (black) and soluble fraction of HEWL fibrils (red).

FTIR spectra of HEWL fibrils initial and upon interactions with polysaccharides

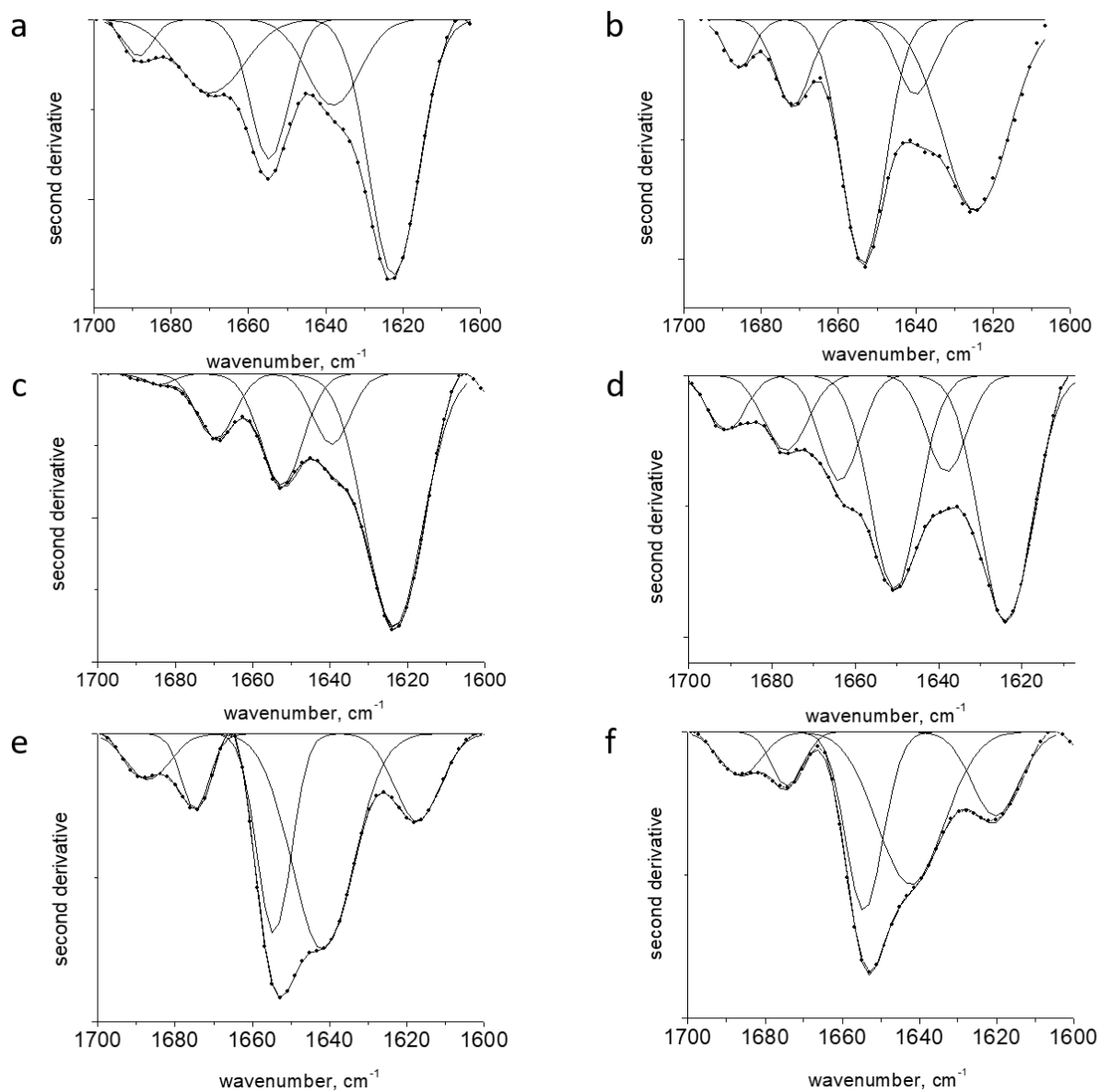


Figure S2. Second derivative of FTIR spectra : insoluble fraction of HEWL fibrils (a), soluble fraction of HEWL fibrils (b), soluble fraction of HEWL fibrils mixes with chitosan (c), soluble fraction of HEWL fibrils mixes with galactan (d), soluble fraction of HEWL fibrils mixes with κ -carrageenan (e), soluble fraction of HEWL fibrils mixes with sodium alginate (f).

Table S1. Some characteristics of main components of FTIR spectra. .

Sample	Wavenumber, cm ⁻¹	Halfwidth, cm ⁻¹	Peak area, %	Peak attribution
I	1622	15	44	amyloid β -structure + side chains*
S	1624	20	40	
Ch	1623	17	58	
G	1623	15	36	
C	1617	14	14	
A	1620	14	16	
I	1654	12	19	α -helix
S	1653	13	35	
Ch	1652	13	19	
G	1651	14	28	
C	1654	10	24	
A	1654	11	27	
I	1638	16	16	intramolecular β -structure
S	1640	9	9	
Ch	1640	10	11	
G	1638	10	11	
C	1642	18	47	
A	1642	20	42	

* the contribution of side chains clearly appearing for C and A was not subtracted from the spectra of I, S, Ch and G. The area of whole band was taken to estimate the content of β -structure. Samples denoted as: I – insoluble fraction of HEWL fibrils, S – soluble fraction of HEWL fibrils, Ch – soluble fraction of HEWL fibrils mixes with chitosan, G – soluble fraction of HEWL fibrils mixes with galactan, C – soluble fraction of HEWL fibrils mixes with κ -carrageenan, A – soluble fraction of HEWL fibrils mixes with sodium alginate.