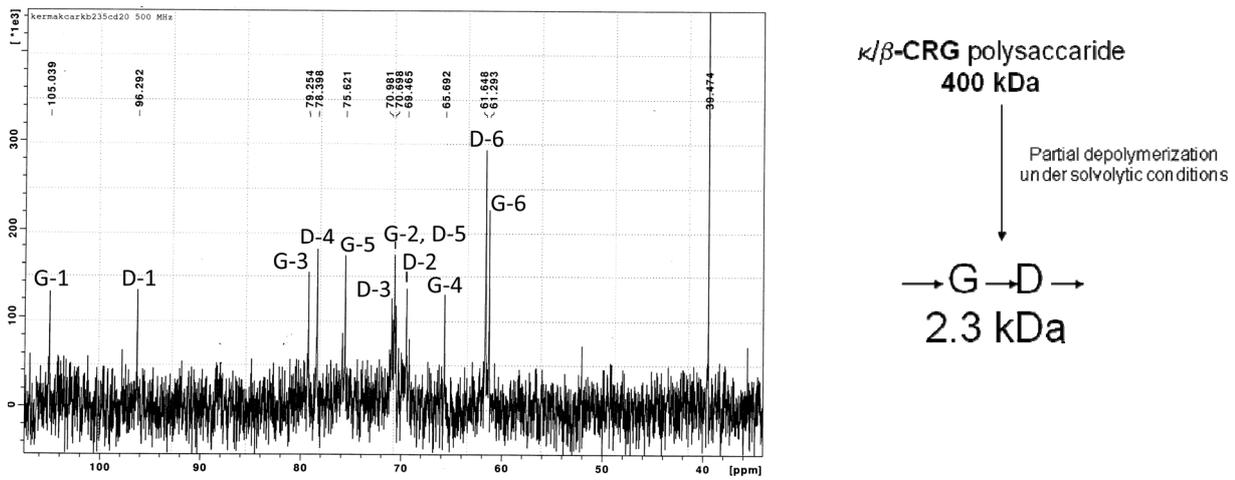
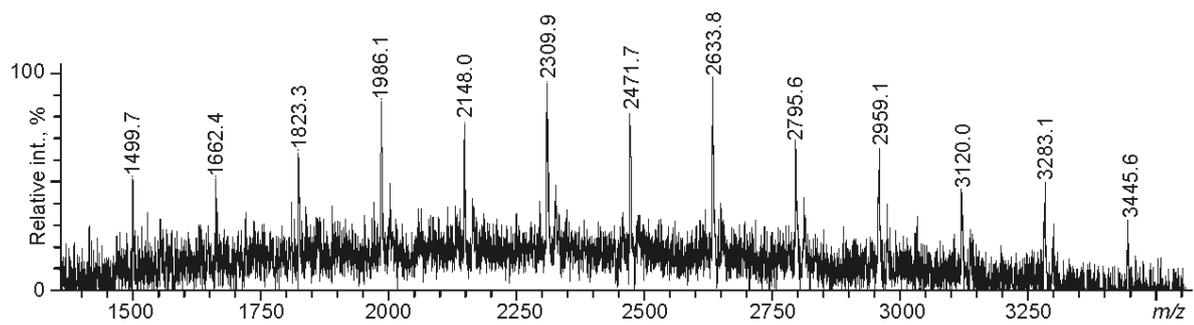


Supplementary S1. The FT-IR spectra of the a)  $\kappa/\beta$ -CRG and b) LMW-CRG.



Supplementary S2.  $^{13}\text{C}$  NMR of solvolytic desulfation/degradation products, obtained from  $\kappa/\beta$ -CRG.



Supplementary S3. Positive-ion MALDI-TOFMS of polysaccharide, obtained from  $\kappa/\beta$ -CRG by solvolytic desulfation/degradation.