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Supplemental Information

Cellulose nanocrystals with tunable surface charge for nanomedicine

Supporting Information

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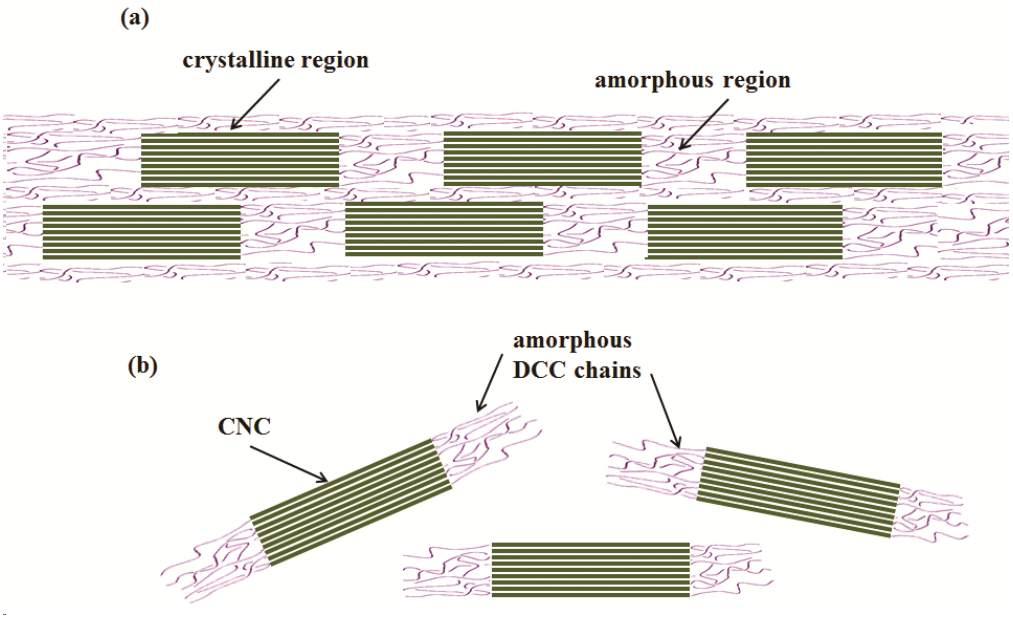

Scheme S1. Schematic presentation of (a) CNC packed inside a cellulose micro-fibril, and (b) CNCs separated via the double oxidation process.

Table S1. Hydrodynamic diameter of CNCs in high salt media (nm)†

fraction #	in PBS	in DMEM
1	125.9 (6.2)	138.5 (5.3)
2	134.6 (5.4)	130.4 (5.0)
3	125.5 (2.8)	130.8 (8.1)
4	116.3 (6.2)	127.3 (4.5)
5	121.3 (2.4)	115.9 (8.3)
6	106.6 (3.9)	119.5 (11.2)

†values in parentheses represent 95% confidence intervals

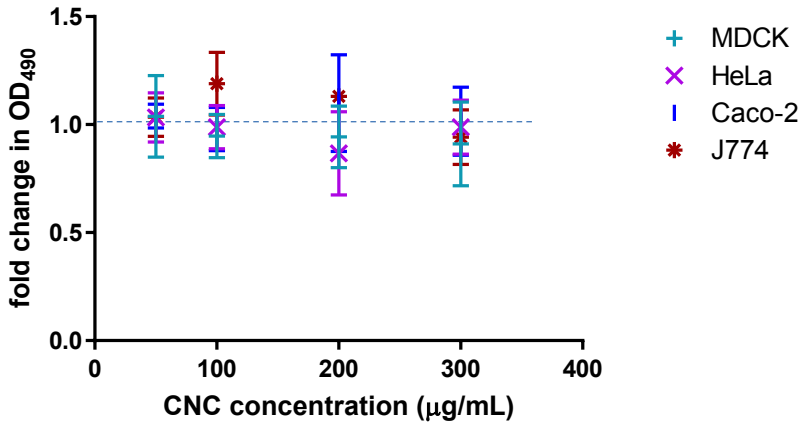

Figure S1. Effect of various concentrations of CNC-FL (fraction 1) on cell metabolic activity of four cell lines. Values present the average OD_{490} for the samples divided by the average OD_{490} of the negative control; n=3, error bars represent 95% confidence intervals. The y-value of 1.0 represents the value of the control.

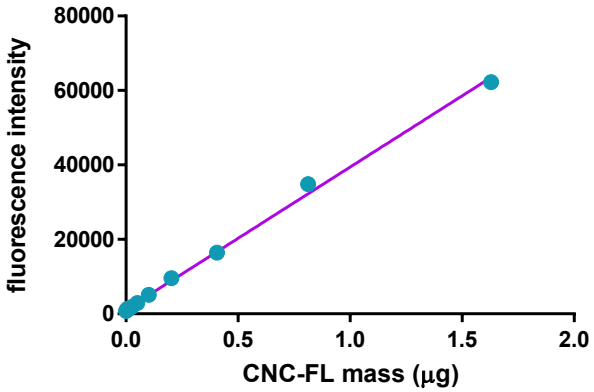

Figure S2. Calibration curve for fluoresceinamine-conjugated CNC (CNC-FL, fraction 1). The calibration curve correlates the mass of CNC-FL suspended in DMEM and the fluorescence intensity of the suspension (ex/em 496/525).