One-step purification of L-asparaginase from cell extracts using carbon xerogels

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2. Experimental Section

2.9 Semi-continuous ASNase purification from the cell extract

2.9.1 *Adsorption of non-target proteins from the cell extract onto CXs*

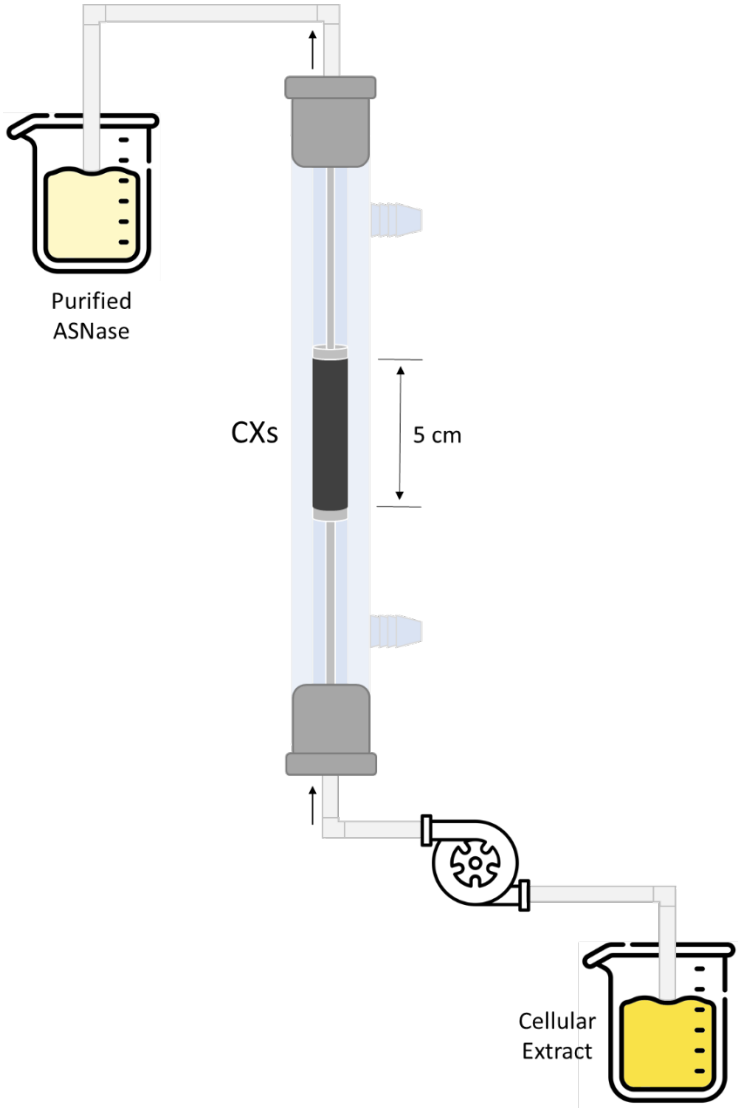

Figure S1 - Semi-continuous purification column of ASNase from cell extract packed with CXs and operating at a flow rate of 1 mL/min and room temperature.

3. Results and Discussion

3.1 CXs characterization

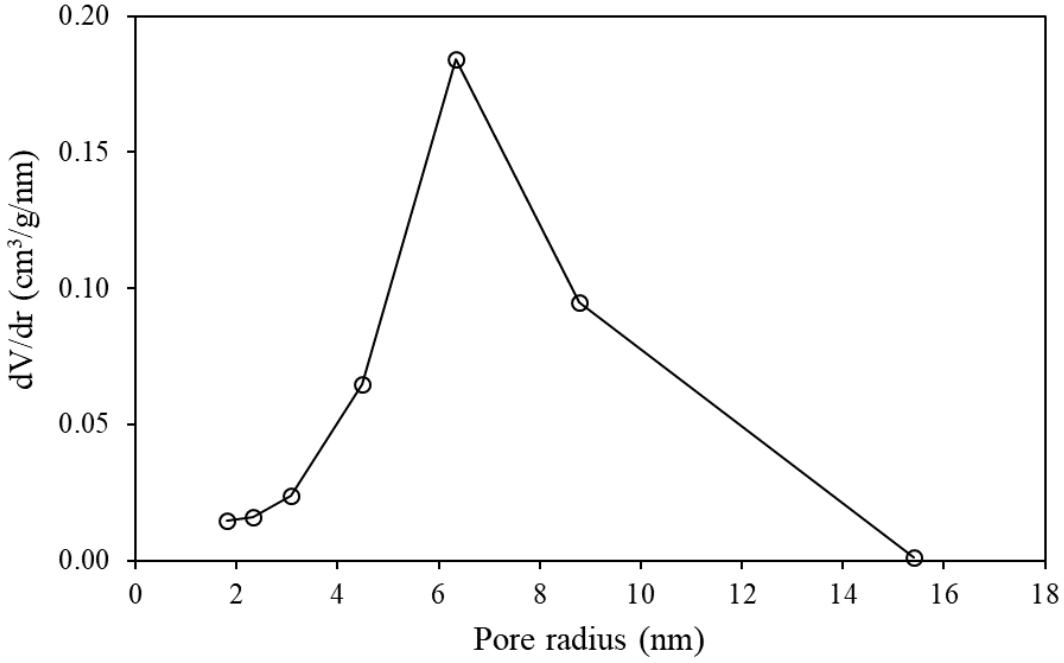

Figure S2 - Pore radius (r_p) distribution of synthesized CXs determined using the BJH method.

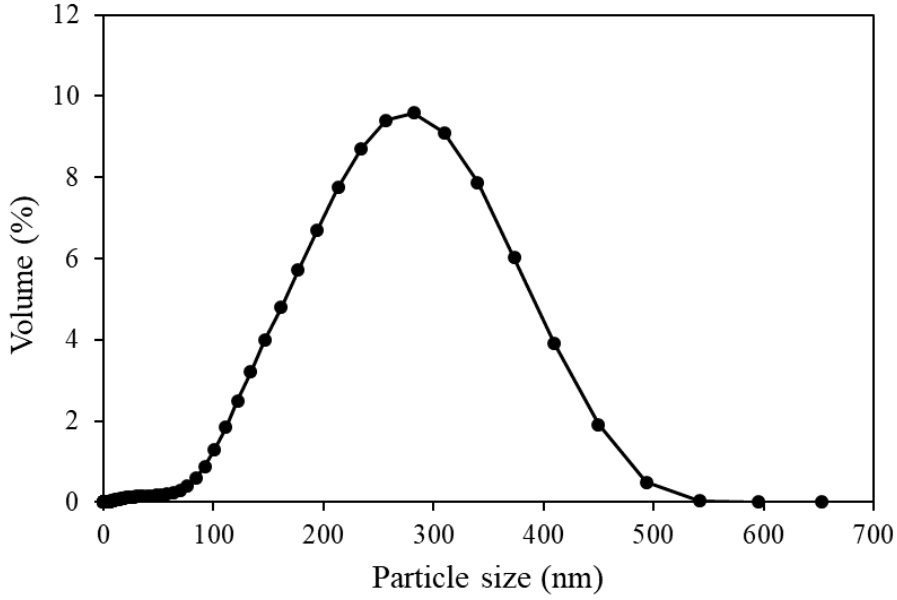

Figure S3 – Particle size distribution of the synthesized CXs determined by laser diffraction.

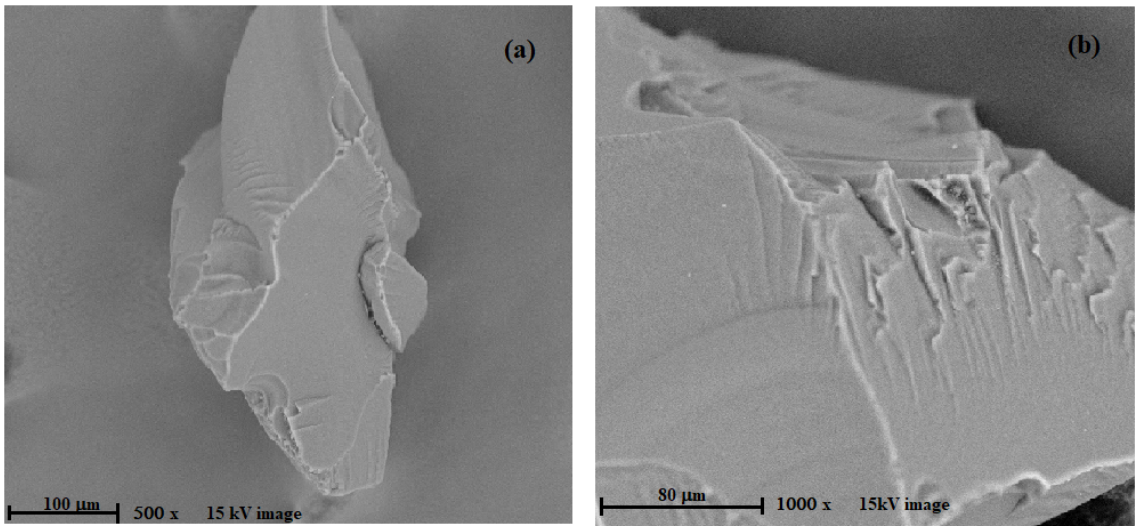

Figure S4 - SEM images of the synthesized CXs determined at 15 kV.

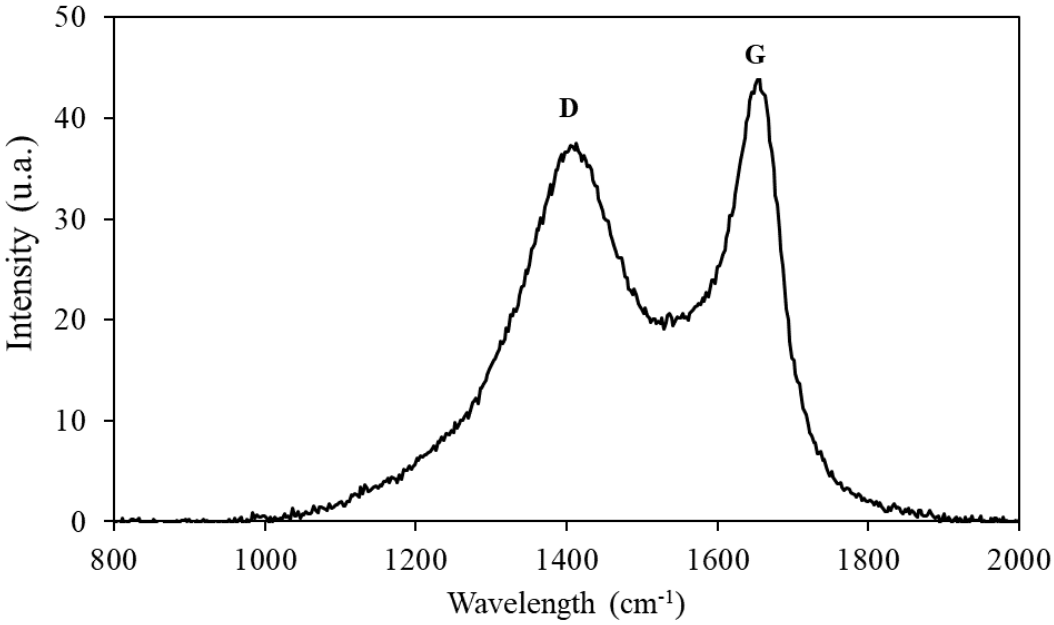

Figure S5 – Raman spectra of synthesized CXs determined at 532 nm and 5 mW.

3.3 Semi-continuous purification of ASNase from the cell extract

3.3.2 *Protein desorption and CXs reusability*

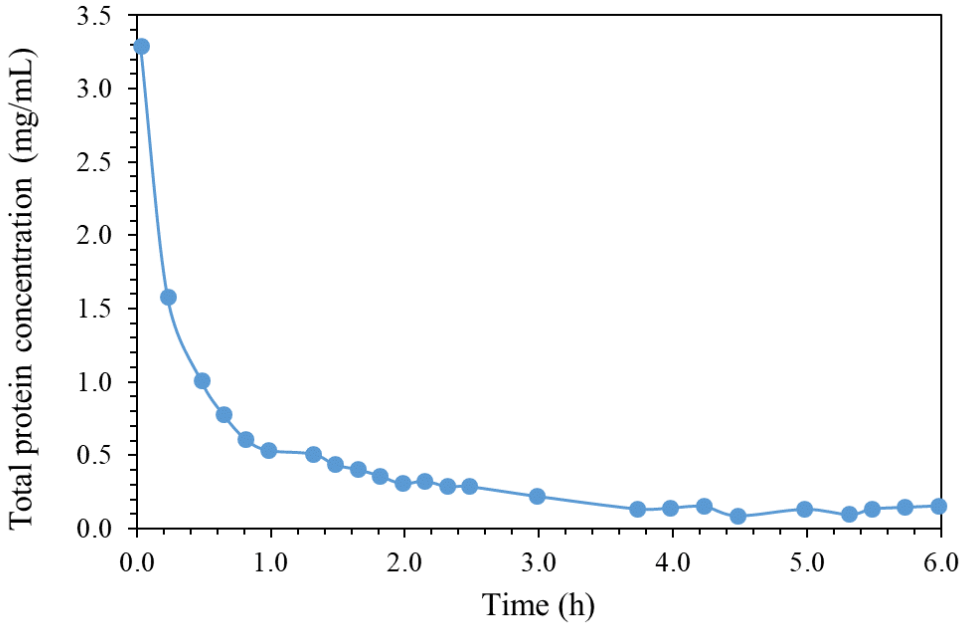

Figure S6 - Time-dependent desorption of total protein concentration (mg/mL) of cell extract with a flow rate of 1.5 mg/mL of distilled water at 50 ºC after the initial ASNase purification test.