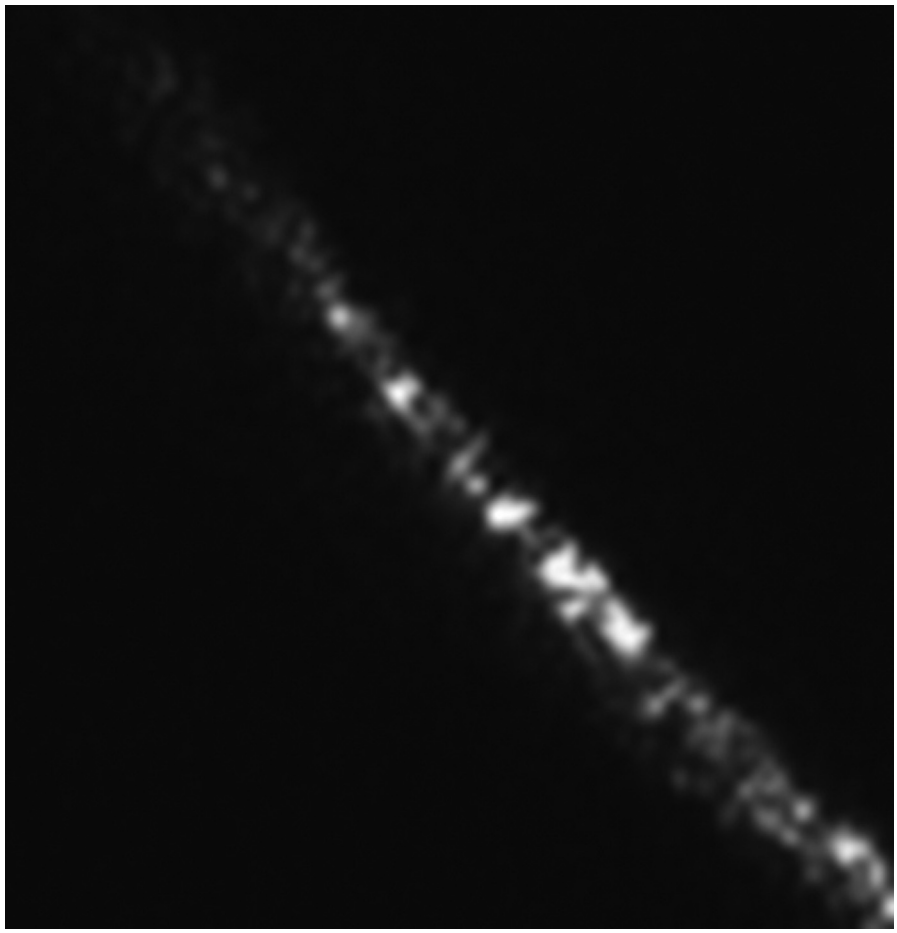
Supporting Information

Berenguer et al. 10.1073/pnas.0905151106

Movie S1 (MOV)



Movie S1. Coherent X-ray diffraction data obtained from rat tail tendon with an aperture of 10 μm x 10 μm in beamline ID34-C, Advanced Photon Source. One of the first meridional reflections is shown. A ptychography scan was performed by scanning the coherent probe along the tendon long axis in 151 positions spaced 2 μm apart and recording one diffraction pattern per position. Successive images in the movie correspond to diffraction patterns from successive beam positions on the sample. Due to the X-ray beam coherence, the reflection is speckled. The speckles change consistently between successive patterns, reflecting the changes in the sample nanostructure all along the scanned area. The inversion of these data will eventually allow obtaining a dark field image of the sample where the collagen within will be clearly distinguish from the other tissue components.