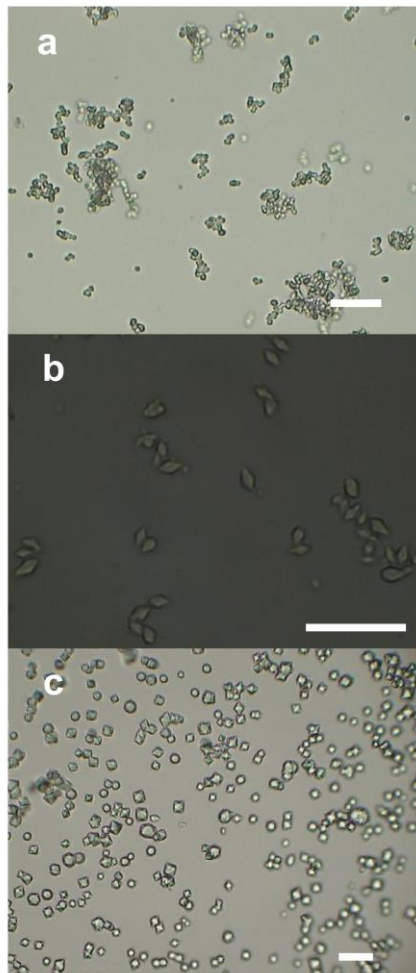


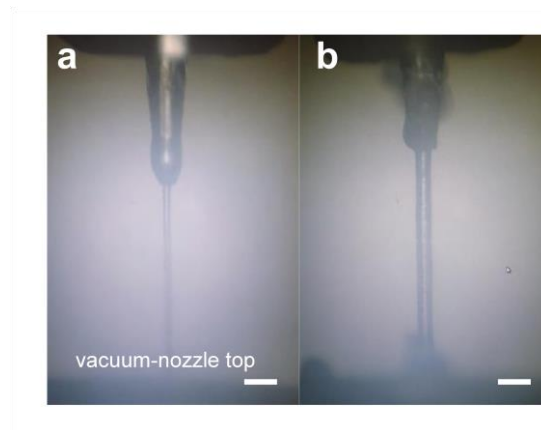
# **Hydroxyethyl cellulose matrix applied to serial crystallography**

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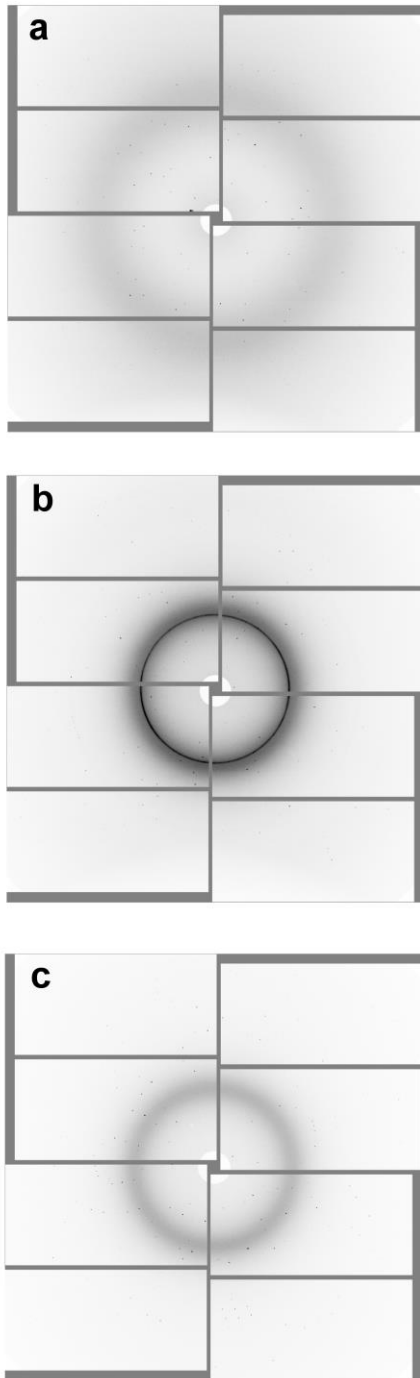
## **Supplementary Figures**



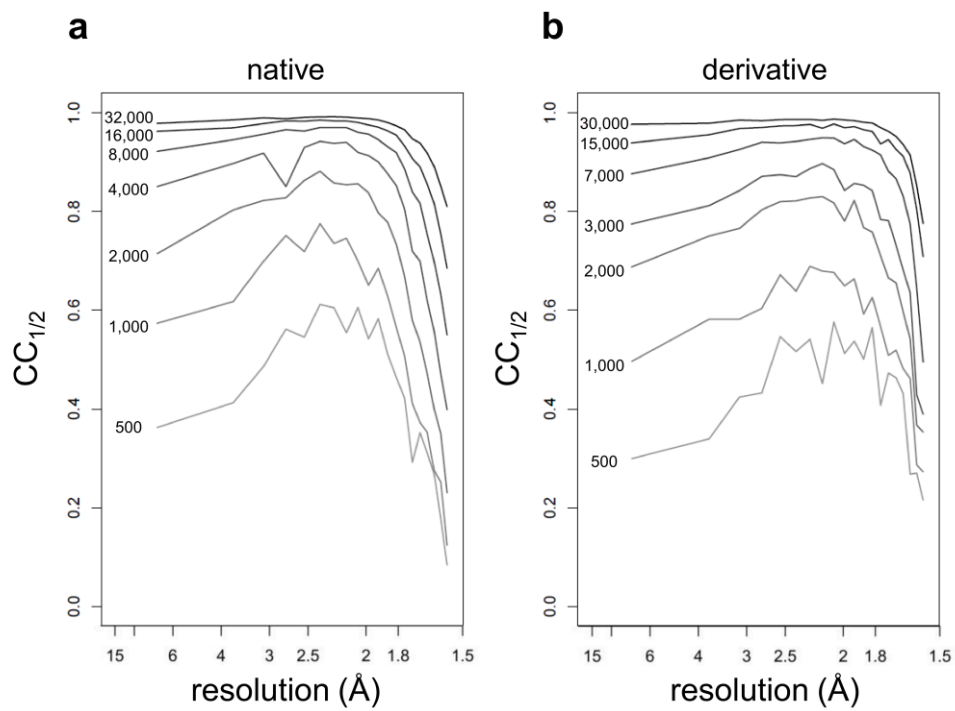
**Supplementary Figure 1: Protein microcrystals used for SFX measurements. (a) lysozyme, (b) thaumatin and (c) proteinase K crystals. Scale bars represent 20  $\mu\text{m}$ .**



**Supplementary Figure 2: Sample extrusion of the two crystal carriers.** (a) hydroxyethyl cellulose and (b) Super Lube Nuclear grease were extruded as a continuous column to intersect with the XFEL beam through a 50- and 100- $\mu\text{m}$ -i.d. nozzle, respectively. Scale bars represent 200  $\mu\text{m}$ .



**Supplementary Figure 3: Typical XFEL single diffraction.** (a) cellulose matrix, (b) Super Lube synthetic grease and (c) Super Lube nuclear grease.



**Supplementary Figure 4:  $CC_{1/2}$  of the proteinase K datasets for different numbers of indexed images. (a) native and (b) Pr-derivative.**