

Supporting information

Seeding protein crystallization with cross-linked protein crystals

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The authors declare no conflict of interest.

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SI Tables

Table S1. Proteins used in the crystallization experiments

No.	Protein	Abbrev.	Initial concentration		Lot no.	Supplier
			(mg ml ⁻¹)			
1	Lysozyme	lys	15		E05801	Seikagaku
2	Proteinase K	pK	10		P6556	Sigma-Aldrich
3	Concanavalin A	con	2		L7647	Sigma-Aldrich
4	Catalase	cata	20		C40	Sigma-Aldrich
5	Thaumatococin	th	20		T7638	Sigma-Aldrich
6	Glucose isomerase	glu	7		L112309	Hampton -Research
7	α -Chymotrypsinogen A II	chy II	20		C4789	Sigma-Aldrich
8	α -Chymotrypsin	chy	20		C4129	Sigma-Aldrich
9	Subtilisin A VIII	sub	20		P5380	Sigma-Aldrich
10	Myoglobin	my	20		M1882	Sigma-Aldrich
11	Pepsin	pep	20		P6887	Sigma-Aldrich
12	Trypsin	try	20		T1426	Sigma-Aldrich
13	Hemoglobin	hem	20			Purified by our laboratory

Table S2. Information about the five proteins used as seeds in this study

Protein	MW, kDa	Space groups	pI	Source
Lysozyme	14.5	Cubic syngony (P4 ₃ 2 ₁ 2)	11.3	Chicken egg white
Concanavalin A	25.5	Tetragonal syngony (I222)	5.5	<i>Canavalia ensiformis</i>
Catalase	232	Hexagonal syngony (P6 ₃)	5	Bovine liver
Proteinase K	28.5	Cubic syngony (P4 ₃ 2 ₁ 2)	8.9	<i>Engyodontium album</i>
Glucose	43.3	Tetragonal syngony (I222)	4.95	<i>Streptomyces</i>
isomerase				<i>rubiginosus</i>

SI Figures

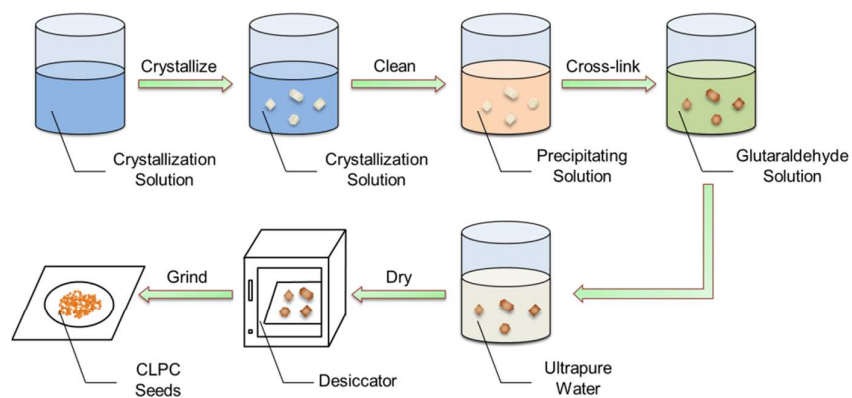


Figure S1. Schematic procedure for the preparation of CLPC seeds. (a) Preparation of the crystallization solution; (b) crystallization of the protein; (c) replacement of the crystallization solution with its corresponding precipitant solution; (d) cross-linking of the protein crystals using glutaraldehyde solution; (e) washing the CLPCs with triple-distilled water; (f) drying the CLPCs in a desiccator; (g) pulverizing the CLPCs into crystalline particles to obtain CLPC seeds.