

## Supplementary Material

A high performance protein crystallization plate pre-embedded with crosslinked  
protein microcrystals as seeds

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**Abbreviation:** CDM Crosss-diffusion microbatch

Table S1. Buffers and initial concentration for 12 different proteins

Proteins	Abbrev	Catalogue	Buffer	Initial concentration (mg/mL)
lysozyme	lys.	100940	0.1 M NaAc, pH 4.6	30.0
proteinase K	prk.	P6556	25 mM HEPES-Na, pH 7.0	18.0
catalase	cat.	C40	25 mM HEPES-Na, pH 7.0	20.0
$\alpha$ -chymotrypsinogen A type II	chy.	C4879	25 mM HEPES-Na, pH 7.0	20.0
glucose isomerase	glu.	HR7	25 mM HEPES-Na, pH 7.0	10.0
concanavalin A type VI	con.	L7647	25 mM HEPES-Na, pH 7.0	20.0
myoglobin	myo.	M1882	25 mM HEPES-Na, pH 7.0	20.0
cellulase	cel.	C0615	25 mM HEPES-Na, pH 7.0	20.0
ribonuclease A type I	rib.	R4875	25 mM HEPES-Na, pH 7.0	20.0
subtilisin A type VIII	sub.	P5380	25 mM HEPES-Na, pH 7.0	20.0
pespin from porcine gastric mocasa	pes.	P6887	25 mM HEPES-Na, pH 7.0	20.0
hemoglobin from chicken blood	hem.	-	25 mM HEPES-Na, pH 7.0	20.0

Table S2. The number of crystallization screening hits comparison of 12 proteins in two different crystallization plates

Proteins	The number of screening hits using CDM plate	The number of screening hits using CDM plus plate plus	% Increased in number of screening hits using CDM plate plus
lysozyme (lys.)	14	27	193
proteinase K (prk.)	34	64	188
catalase (cat.)	10	30	300
$\alpha$ -chymotrypsinogen A type II (chy.)	20	46	230
glucose isomerase (glu.)	4	41	1025
concanavalin A type VI (con.)	37	58	157
myoglobin (myo.)	0	4	-
cellulase (cel.)	1	8	800
ribonuclease A type I (rib.)	1	2	200
subtilisin A type VIII (sub.)	1	4	400
pespin from porcine gastric mocasa (pes.)	2	6	300
hemoglobin from chicken blood (hem.)	6	15	250