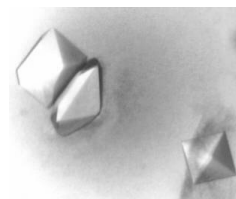


# The Classics Lite Suite

## For screening of protein crystallization conditions



### The Classics Lite Suite provides:

- A ready-to-use kit format to which only protein needs to be added, for easy and fast screening
- Ideal conditions for an initial screening to define crystallization conditions of a new protein
- 96 precisely defined chemical solutions designed with half of the precipitant concentration of the Classics Suite
- A spectrum of the most popular chemicals in protein crystallography with conditions based on the work by Jancarik and Kim (1)

The Classics Lite Suite is available in a wide range of formats to suit all scales and throughputs.

EasyXtal Refill-Hit Solutions can be used to develop grids around the original hit conditions. An overview of the composition of the 96 solutions together with an order number for the corresponding Refill-Hit Solution can be found on pages 2 and 3. The location of each Refill-Hit Solution number is given in the diagram below.

1. Jancarik, J., and Kim, S-H. (1991) Sparse matrix sampling: a screening method for crystallization of proteins. *J. Appl. Cryst.* **24**, 411.

### Location of Refill-Hit Solutions in 24-Well and 96-Well Plate Formats

	1	2	3	4	5	6
A	1	2	3	4	5	6
B	7	8	9	10	11	12
C	13	14	15	16	17	18
D	19	20	21	22	23	24

24-well plate 1 of 4

	1	2	3	4	5	6
A	25	26	27	28	29	30
B	31	32	33	34	35	36
C	37	38	39	40	41	42
D	43	44	45	46	47	48

24-well plate 2 of 4

	1	2	3	4	5	6
A	49	50	51	52	53	54
B	55	56	57	58	59	60
C	61	62	63	64	65	66
D	67	68	69	70	71	72

24-well plate 3 of 4

	1	2	3	4	5	6
A	73	74	75	76	77	78
B	79	80	81	82	83	84
C	85	86	87	88	89	90
D	91	92	93	94	95	96

24-well plate 4 of 4

	1	2	3	4	5	6	7	8	9	10	11	12
A	1	2	3	4	5	6	7	8	9	10	11	12
B	13	14	15	16	17	18	19	20	21	22	23	24
C	25	26	27	28	29	30	31	32	33	34	35	36
D	37	38	39	40	41	42	43	44	45	46	47	48
E	49	50	51	52	53	54	55	56	57	58	59	60
F	61	62	63	64	65	66	67	68	69	70	71	72
G	73	74	75	76	77	78	79	80	81	82	83	84
H	85	86	87	88	89	90	91	92	93	94	95	96

96-well plate



## The Classics Lite Suite Composition Table

Number	Salt	Buffer	Precipitant	Cat. no. (Refill-Hit Solution, 4 x 12.5 ml tubes)
1	0.01 M Cobalt chloride	0.1 M Sodium acetate pH 4.6	0.5 M 1,6-Hexanediol	134101
2		0.1 M tri-Sodium citrate pH 5.6	1.25 M 1,6-Hexanediol	134102
3	0.2 M Magnesium chloride	0.1 M Tris pH 8.5	1.7 M 1,6-Hexanediol	134103
4			2.5% (v/v) Isopropanol; 1.0 M Ammonium sulfate	134104
5		0.1 M HEPES sodium salt pH 7.5	5% (v/v) Isopropanol; 10% (w/v) PEG 4000	134105
6	0.2 M Calcium chloride	0.1 M Sodium acetate pH 4.6	10% (v/v) Isopropanol	134106
7		0.1 M tri-Sodium citrate pH 5.6	10% (v/v) Isopropanol; 10% (w/v) PEG 4000	134107
8	0.2 M tri-Sodium citrate	0.1 M HEPES sodium salt pH 7.5	10% (v/v) Isopropanol	134108
9	0.2 M tri-Sodium citrate	0.1 M Sodium cacodylate pH 6.5	15% (v/v) Isopropanol	134109
10	0.2 M Magnesium chloride	0.1 M HEPES sodium salt pH 7.5	15% (v/v) Isopropanol	134110
11	0.2 M Ammonium acetate	0.1 M Tris-HCl pH 8.5	15% (v/v) Isopropanol	134111
12			5% (v/v) Ethanol; 0.75 M Sodium chloride	134112
13		0.1 M Tris pH 8.5	10% (v/v) Ethanol	134113
14			12.5% (v/v) Ethylene glycol	134114
15	0.02 M Calcium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) MPD	134115
16	0.2 M Sodium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) MPD	134116
17	0.2 M Ammonium acetate	0.1 M tri-Sodium citrate pH 5.6	15% (v/v) MPD	134117
18	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	15% (v/v) MPD	134118
19	0.2 M tri-Sodium citrate	0.1 M HEPES sodium salt pH 7.5	15% (v/v) MPD	134119
20	0.5 M Ammonium sulfate	0.1 M HEPES pH 7.5	15% (v/v) MPD	134120
21	0.2 M Ammonium phosphate	0.1 M Tris pH 8.5	25% (v/v) MPD	134121
22		0.1 M HEPES pH 7.5	35% (v/v) MPD	134122
23		0.1 M Tris pH 8.5	12.5% (v/v) tert-Butanol	134123
24		0.1 M tri-Sodium citrate pH 5.6	17.5% (v/v) tert-Butanol	134124
25			0.2 M Ammonium phosphate	134125
26		0.1 M tri-Sodium citrate pH 5.6	0.5 M Ammonium phosphate	134126
27		0.1 M Tris-HCl pH 8.5	1.0 M Ammonium phosphate	134127
28		0.1 M HEPES pH 7.5	1.0 M Ammonium formate	134128
29		0.1 M Sodium acetate pH 4.6	1.0 M Ammonium sulfate	134129
30		0.1 M Tris-HCl pH 8.5	1.0 M Ammonium sulfate	134130
31			1.0 M Ammonium sulfate	134131
32	0.1 M Sodium chloride	0.1 M HEPES pH 7.5	0.8 M Ammonium sulfate	134132
33	0.01 M Cobalt chloride	0.1 M MES pH 6.5	0.9 M Ammonium sulfate	134133
34	0.2 M K/Na tartrate	0.1 M tri-Sodium citrate pH 5.6	1 M Ammonium sulfate	134134
35			0.5 M Imidazole pH 7.0	134135
36			0.2 M K/Na tartrate	134136
37		0.1 M HEPES sodium salt pH 7.5	0.4 M K/Na tartrate	134137
38		0.1 M Imidazole pH 6.5	0.5 M Sodium acetate	134138
39	0.05 M Cadmium sulfate	0.1 M HEPES pH 7.5	0.5 M Sodium acetate	134139
40		0.1 M Sodium cacodylate pH 6.5	0.7 M Sodium acetate	134140
41		0.1 M Sodium acetate pH 4.6	1.0 M Sodium chloride	134141
42	0.1 M Sodium phosphate; 0.1 M Potassium phosphate	0.1 M MES pH 6.5	1.0 M Sodium chloride	134142
43		0.1 M HEPES pH 7.5	2.15 M Sodium chloride	134143
44		0.1 M HEPES sodium salt pH 7.5	0.7 M tri-Sodium citrate	134144
45			0.8 M tri-Sodium citrate pH 6.5	134145
46		0.1 M HEPES sodium salt pH 7.5	0.4 M Sodium phosphate; 0.4 M Potassium phosphate	134146
47		0.1 M Sodium acetate pH 4.6	1.0 M Sodium formate	134147
48			2.0 M Sodium formate	134148

## The Classics Lite Suite Composition Table

Number	Salt	Buffer	Precipitant	Cat. no. (Refill-Hit Solution, 4 x 12.5 ml tubes)
49		0.1 M Bicine pH 9.0	1% (v/v) Dioxane; 5% (w/v) PEG 20000	134149
50		0.1 M MES pH 6.5	5% (v/v) Dioxane; 0.8 M Ammonium sulfate	134150
51			17.5% (v/v) Dioxane	134151
52	0.5 M Sodium chloride	0.1 M tri-Sodium citrate pH 5.6	1% (v/v) Ethylene imine polymer	134152
53		0.1 M Tris pH 8.5	6% (v/v) Glycerol; 0.75 M Ammonium sulfate	134153
54	0.25 M Sodium chloride; 0.005 M Magnesium chloride		0.01 M CTAB	134154
55	0.01 M Ferric chloride	0.1 M tri-Sodium citrate pH 5.6	5% (v/v) Jeffamine M-600	134155
56		0.1 M HEPES pH 7.5	10% (v/v) Jeffamine M-600	134156
57	0.5 M Ammonium sulfate	0.1 M tri-Sodium citrate pH 5.6	0.5 M Lithium sulfate	134157
58	0.01 M Nickel chloride	0.1 M Tris pH 8.5	0.5 M Lithium sulfate	134158
59		0.1 M HEPES sodium salt pH 7.5	0.75 M Lithium sulfate	134159
60		0.1 M Bicine pH 9.0	1.0 M Magnesium chloride	134160
61			0.1 M Magnesium formate	134161
62		0.1 M MES pH 6.5	0.8 M Magnesium sulfate	134162
63		0.1 M Tris-HCl pH 8.5	4% (w/v) PEG 8000	134163
64		0.1 M HEPES pH 7.5	5% (w/v) PEG 8000	134164
65	0.5 M Lithium sulfate		7.5% (w/v) PEG 8000	134165
66	0.2 M Zinc acetate	0.1 M Sodium cacodylate pH 6.5	9% (w/v) PEG 8000	134166
67	0.2 M Calcium acetate	0.1 M Sodium cacodylate pH 6.5	9% (w/v) PEG 8000	134167
68	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	10% (w/v) PEG 8000	134168
69	0.05 M Potassium phosphate		10% (w/v) PEG 8000	134169
70	0.2 M Ammonium sulfate	0.1 M Sodium cacodylate pH 6.5	15% (w/v) PEG 8000	134170
71	0.2 M Sodium acetate	0.1 M Sodium cacodylate pH 6.5	15% (w/v) PEG 8000	134171
72	0.2 M Ammonium sulfate		15% (w/v) PEG 8000	134172
73		0.1 M HEPES sodium salt pH 7.5	1% (v/v) PEG 400; 1.0 M Ammonium sulfate	134173
74	0.2 M Calcium chloride	0.1 M HEPES sodium salt pH 7.5	14% (v/v) PEG 400	134174
75	0.1 M Cadmium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) PEG 400	134175
76	0.2 M Magnesium chloride	0.1 M HEPES sodium salt pH 7.5	15% (v/v) PEG 400	134176
77	0.2 M tri-Sodium citrate	0.1 M Tris-HCl pH 8.5	15% (v/v) PEG 400	134177
78	0.1 M Sodium chloride	0.1 M Bicine pH 9.0	10% (w/v) PEG 550 MME	134178
79	0.01 M Zinc sulfate	0.1 M MES pH 6.5	12.5% (w/v) PEG 550 MME	134179
80			5% (w/v) PEG 1000; 5% (w/v) PEG 8000	134180
81			15% (w/v) PEG 1500	134181
82	0.01 M Nickel chloride	0.1 M Tris pH 8.5	10% (w/v) PEG 2000 MME	134182
83	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	15% (w/v) PEG 2000 MME	134183
84		0.1 M Sodium acetate pH 4.6	4% (w/v) PEG 4000	134184
85	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	12.5% (w/v) PEG 4000	134185
86	0.2 M Ammonium acetate	0.1 M Sodium acetate pH 4.6	15% (w/v) PEG 4000	134186
87	0.2 M Ammonium acetate	0.1 M tri-Sodium citrate pH 5.6	15% (w/v) PEG 4000	134187
88	0.2 M Magnesium chloride	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134188
89	0.2 M Lithium sulfate	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134189
90	0.2 M Sodium acetate	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134190
91	0.2 M Ammonium sulfate		15% (w/v) PEG 4000	134191
92	0.2 M Ammonium sulfate	0.1 M MES pH 6.5	15% (w/v) PEG 5000 MME	134192
93		0.1 M HEPES pH 7.5	5% (w/v) PEG 6000; 2.5% (v/v) MPD	134193
94			5% (w/v) PEG 6000; 1.0 M Sodium chloride	134194
95		0.1 M HEPES pH 7.5	10% (w/v) PEG 10000; 4% (v/v) Ethylene glycol	134195
96		0.1 M MES pH 6.5	6% (w/v) PEG 20000	134196

## Protein Crystallization Suites and Formats

	EasyXtal Microplate	NeXtal Deep- Well Block	EasyXtal DG Tool X-Seal	NeXtal Tubes
The Classics Suite		■	■	■
The Classics Lite Suite		■	■	■
The Classics II Suite		■	■	■
The Cryos Suite		■	■	■
The PEGs Suite		■	■	■
The AmSO <sub>4</sub> Suite		■	■	■
The MPD Suite		■	■	■
The Anions Suite		■	■	■
The Cations Suite		■	■	■
The pHClear Suite		■	■	■
The pHClear II Suite		■	■	■
The MbClass Suite		■	■	■
The MbClass II Suite		■	■	■
The Protein Complex Suite		■	■	■
The PEGs II Suite		■	■	■
The ComPAS Suite		■	■	■
The PACT Suite		■	■	■
The Nucleix Suite		■	■	■
The JCSG+ Suite		■	■	■
The JCSG Core I-IV Suites		■	■	■
The Opti-Salts Suite	■	■	■	
Pre-Screen Assay			■	

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