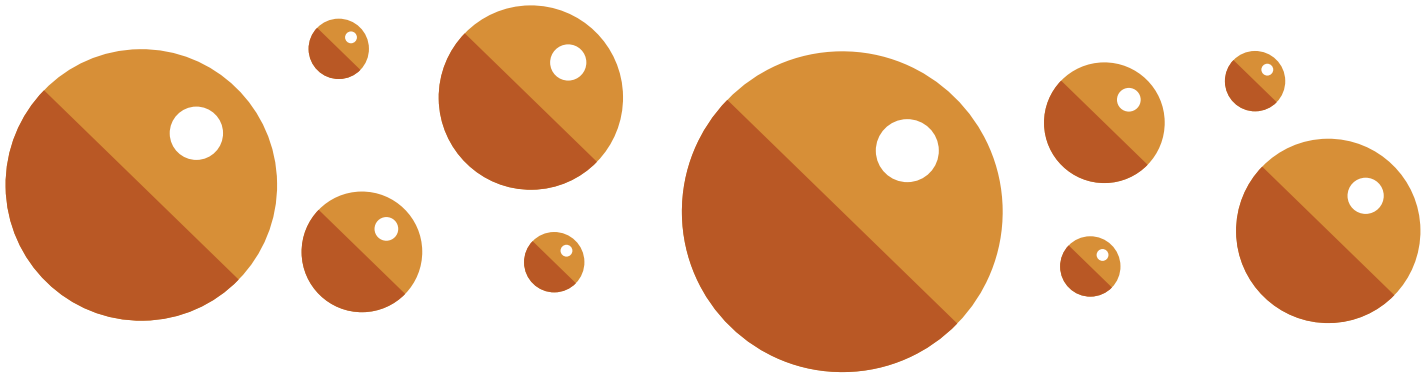

THE CLASSICS LITE SUITE

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 1 ml DWBlock and 10 ml tube formats.

The formulations of the 96 conditions of this screen, together with an order number for the 100 ml refill solution for each condition, are found on pages 2 and 3. Optimization reagent stock solutions for each NeXtal crystallization screen are available on our website. Please contact us with any questions about condition formulations or optimization.

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

THE CLASSICS LITE SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
1	A1	0.01 M Cobalt chloride	0.1 M Sodium acetate pH 4.6	0.5 M 1,6-Hexanediol	134101-1
2	A2		0.1 M tri-Sodium citrate pH 5.6	1.25 M 1,6-Hexanediol	134101-2
3	A3	0.2 M Magnesium chloride	0.1 M Tris pH 8.5	1.7 M 1,6-Hexanediol	134101-3
4	A4			2.5% (v/v) Isopropanol; 1.0 M Ammonium sulfate	134101-4
5	A5		0.1 M HEPES sodium salt pH 7.5	5% (v/v) Isopropanol; 10% (w/v) PEG 4000	134101-5
6	A6	0.2 M Calcium chloride	0.1 M Sodium acetate pH 4.6	10% (v/v) Isopropanol	134101-6
7	A7		0.1 M tri-Sodium citrate pH 5.6	10% (v/v) Isopropanol; 10% (w/v) PEG 4000	134101-7
8	A8	0.2 M tri-Sodium citrate	0.1 M HEPES sodium salt pH 7.5	10% (v/v) Isopropanol	134101-8
9	A9	0.2 M tri-Sodium citrate	0.1 M Sodium cacodylate pH 6.5	15% (v/v) Isopropanol	134101-9
10	A10	0.2 M Magnesium chloride	0.1 M HEPES sodium salt pH 7.5	15% (v/v) Isopropanol	134101-10
11	A11	0.2 M Ammonium acetate	0.1 M Tris·HCl pH 8.5	15% (v/v) Isopropanol	134101-11
12	A12			5% (v/v) Ethanol; 0.75 M Sodium chloride	134101-12
13	B1		0.1 M Tris pH 8.5	10% (v/v) Ethanol	134101-13
14	B2			12.5% (v/v) Ethylene glycol	134101-14
15	B3	0.02 M Calcium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) MPD	134101-15
16	B4	0.2 M Sodium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) MPD	134101-16
17	B5	0.2 M Ammonium acetate	0.1 M tri-Sodium citrate pH 5.6	15% (v/v) MPD	134101-17
18	B6	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	15% (v/v) MPD	134101-18
19	B7	0.2 M tri-Sodium citrate	0.1 M HEPES sodium salt pH 7.5	15% (v/v) MPD	134101-19
20	B8	0.5 M Ammonium sulfate	0.1 M HEPES pH 7.5	15% (v/v) MPD	134101-20
21	B9	0.2 M Ammonium phosphate	0.1 M Tris pH 8.5	25% (v/v) MPD	134101-21
22	B10		0.1 M HEPES pH 7.5	35% (v/v) MPD	134101-22
23	B11		0.1 M Tris pH 8.5	12.5% (v/v) tert-Butanol	134101-23
24	B12		0.1 M tri-Sodium citrate pH 5.6	17.5% (v/v) tert-Butanol	134101-24
25	C1			0.2 M Ammonium phosphate	134101-25
26	C2		0.1 M tri-Sodium citrate pH 5.6	0.5 M Ammonium phosphate	134101-26
27	C3		0.1 M Tris·HCl pH 8.5	1.0 M Ammonium phosphate	134101-27
28	C4		0.1 M HEPES pH 7.5	1.0 M Ammonium formate	134101-28
29	C5		0.1 M Sodium acetate pH 4.6	1.0 M Ammonium sulfate	134101-29
30	C6		0.1 M Tris·HCl pH 8.5	1.0 M Ammonium sulfate	134101-30
31	C7			1.0 M Ammonium sulfate	134101-31
32	C8	0.1 M Sodium chloride	0.1 M HEPES pH 7.5	0.8 M Ammonium sulfate	134101-32
33	C9	0.01 M Cobalt chloride	0.1 M MES pH 6.5	0.9 M Ammonium sulfate	134101-33
34	C10	0.2 M K/Na tartrate	0.1 M tri-Sodium citrate pH 5.6	1 M Ammonium sulfate	134101-34
35	C11			0.5 M Imidazole pH 7.0	134101-35
36	C12			0.2 M K/Na tartrate	134101-36
37	D1		0.1 M HEPES sodium salt pH 7.5	0.4 M K/Na tartrate	134101-37
38	D2		0.1 M Imidazole pH 6.5	0.5 M Sodium acetate	134101-38
39	D3	0.05 M Cadmium sulfate	0.1 M HEPES pH 7.5	0.5 M Sodium acetate	134101-39
40	D4		0.1 M Sodium cacodylate pH 6.5	0.7 M Sodium acetate	134101-40
41	D5		0.1 M Sodium acetate pH 4.6	1.0 M Sodium chloride	134101-41
42	D6	0.1 M Sodium phosphate; 0.1 M Potassium phosphate	0.1 M MES pH 6.5	1.0 M Sodium chloride	134101-42
43	D7		0.1 M HEPES pH 7.5	2.15 M Sodium chloride	134101-43
44	D8		0.1 M HEPES sodium salt pH 7.5	0.7 M tri-Sodium citrate	134101-44
45	D9			0.8 M tri-Sodium citrate pH 6.5	134101-45
46	D10		0.1 M HEPES sodium salt pH 7.5	0.4 M Sodium phosphate; 0.4 M Potassium phosphate	134101-46
47	D11		0.1 M Sodium acetate pH 4.6	1.0 M Sodium formate	134101-47
48	D12			2.0 M Sodium formate	134101-48

THE CLASSICS LITE SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
49	E1		0.1 M Bicine pH 9.0	1% (v/v) Dioxane; 5% (w/v) PEG 20000	134101-49
50	E2		0.1 M MES pH 6.5	5% (v/v) Dioxane; 0.8 M Ammonium sulfate	134101-50
51	E3			17.5% (v/v) Dioxane	134101-51
52	E4	0.5 M Sodium chloride	0.1 M tri-Sodium citrate pH 5.6	1% (v/v) Ethylene imine polymer	134101-52
53	E5		0.1 M Tris pH 8.5	6% (v/v) Glycerol; 0.75 M Ammonium sulfate	134101-53
54	E6	0.25 M Sodium chloride; 0.005 M Magnesium chloride		0.01 M CTAB	134101-54
55	E7	0.01 M Ferric chloride	0.1 M tri-Sodium citrate pH 5.6	5% (v/v) Jeffamine M-600	134101-55
56	E8		0.1 M HEPES pH 7.5	10% (v/v) Jeffamine M-600	134101-56
57	E9	0.5 M Ammonium sulfate	0.1 M tri-Sodium citrate pH 5.6	0.5 M Lithium sulfate	134101-57
58	E10	0.01 M Nickel chloride	0.1 M Tris pH 8.5	0.5 M Lithium sulfate	134101-58
59	E11		0.1 M HEPES sodium salt pH 7.5	0.75 M Lithium sultate	134101-59
60	E12		0.1 M Bicine pH 9.0	1.0 M Magnesium chloride	134101-60
61	F1			0.1 M Magnesium formate	134101-61
62	F2		0.1 M MES pH 6.5	0.8 M Magnesium sulfate	134101-62
63	F3		0.1 M Tris-HCl pH 8.5	4% (w/v) PEG 8000	134101-63
64	F4		0.1 M HEPES pH 7.5	5% (w/v) PEG 8000	134101-64
65	F5	0.5 M Lithium sulfate		7.5% (w/v) PEG 8000	134101-65
66	F6	0.2 M Zinc acetate	0.1 M Sodium cacodylate pH 6.5	9% (w/v) PEG 8000	134101-66
67	F7	0.2 M Calcium acetate	0.1 M Sodium cacodylate pH 6.5	9% (w/v) PEG 8000	134101-67
68	F8	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	10% (w/v) PEG 8000	134101-68
69	F9	0.05 M Potassium phosphate		10% (w/v) PEG 8000	134101-69
70	F10	0.2 M Ammonium sulfate	0.1 M Sodium cacodylate pH 6.5	15% (w/v) PEG 8000	134101-70
71	F11	0.2 M Sodium acetate	0.1 M Sodium cacodylate pH 6.5	15% (w/v) PEG 8000	134101-71
72	F12	0.2 M Ammonium sulfate		15% (w/v) PEG 8000	134101-72
73	G1		0.1 M HEPES sodium salt pH 7.5	1% (v/v) PEG 400; 1.0 M Ammonium sulfate	134101-73
74	G2	0.2 M Calcium chloride	0.1 M HEPES sodium salt pH 7.5	14% (v/v) PEG 400	134101-74
75	G3	0.1 M Cadmium chloride	0.1 M Sodium acetate pH 4.6	15% (v/v) PEG 400	134101-75
76	G4	0.2 M Magnesium chloride	0.1 M HEPES sodium salt pH 7.5	15% (v/v) PEG 400	134101-76
77	G5	0.2 M tri-Sodium citrate	0.1 M Tris-HCl pH 8.5	15% (v/v) PEG 400	134101-77
78	G6	0.1 M Sodium chloride	0.1 M Bicine pH 9.0	10% (w/v) PEG 550 MME	134101-78
79	G7	0.01 M Zinc sulfate	0.1 M MES pH 6.5	12.5% (w/v) PEG 550 MME	134101-79
80	G8			5% (w/v) PEG 1000; 5% (w/v) PEG 8000	134101-80
81	G9			15% (w/v) PEG 1500	134101-81
82	G10	0.01 M Nickel chloride	0.1 M Tris pH 8.5	10% (w/v) PEG 2000 MME	134101-82
83	G11	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	15% (w/v) PEG 2000 MME	134101-83
84	G12		0.1 M Sodium acetate pH 4.6	4% (w/v) PEG 4000	134101-84
85	H1	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	12.5% (w/v) PEG 4000	134101-85
86	H2	0.2 M Ammonium acetate	0.1 M Sodium acetate pH 4.6	15%(w/v) PEG 4000	134101-86
87	H3	0.2 M Ammonium acetate	0.1 M tri-Sodium citrate pH 5.6	15% (w/v) PEG 4000	134101-87
88	H4	0.2 M Magnesium chloride	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134101-88
89	H5	0.2 M Lithium sulfate	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134101-89
90	H6	0.2 M Sodium acetate	0.1 M Tris-HCl pH 8.5	15% (w/v) PEG 4000	134101-90
91	H7	0.2 M Ammonium sulfate		15% (w/v) PEG 4000	134101-91
92	H8	0.2 M Ammonium sulfate	0.1 M MES pH 6.5	15% (w/v) PEG 4000	134101-92
93	H9		0.1 M HEPES pH 7.5	5% (w/v) PEG 6000; 2.5% (v/v) MPD	134101-93
94	H10			5% (w/v) PEG 6000; 1.0 M Sodium chloride	134101-94
95	H11		0.1 M HEPES pH 7.5	10% (w/v) PEG 10000; 4% (v/v) Ethylene glycol	134101-95
96	H12		0.1 M MES pH 6.5	6% (w/v) PEG 20000	134101-96

Other NeXtal Crystallization Screens Available

- The Classics Suite
- The Classics Lite Suite
- The Classics II Suite
- The Cryos Suite
- The PEGs Suite
- The $AmSO_4$ 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

NeXtal Biotechnologies
6201 Trust Drive
Holland, OH 43528
P: +1.419.794.7890
F: +1.419.491.1002
W: nextalbiotech.com
E: customerservice@nextalbiotech.com