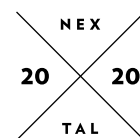


THE CRYOS SUITE

FOR SCREENING OF PROTEIN CRYSTALLIZATION CONDITIONS



The Cryos 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 at high concentrations to evaluate components' effects on protein solubility
- A spectrum of the most popular chemicals in protein crystallography with conditions based on the work by Jancarik and Kim (1)
- Information about protein solubility (if compared side by side with results of the Classics Suite)
- Solutions containing glycerol as cryoprotectant

The Cryos 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 CRYOS SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
1	A1	0.0085 M Cobalt chloride	0.085 M Sodium acetate pH 4.6	0.85 M 1,6-Hexanediol; 15% (v/v) Glycerol	134201-1
2	A2		0.085 M tri-Sodium citrate pH 5.6	2.125 M 1,6-Hexanediol; 15% (v/v) Glycerol	134201-2
3	A3	0.17 M Magnesium chloride	0.085 M Tris pH 8.5	2.89 M 1,6-Hexanediol; 15% (v/v) Glycerol	134201-3
4	A4	1.7 M Ammonium sulfate		4.25% (v/v) Isopropanol; 15% (v/v) Glycerol	134201-4
5	A5		0.085 M HEPES sodium salt pH 7.5	8.5% (v/v) Isopropanol; 17% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-5
6	A6	0.14 M Calcium chloride	0.07 M Sodium acetate pH 4.6	14% (v/v) Isopropanol; 30% (v/v) Glycerol	134201-6
7	A7		0.095 M tri-Sodium citrate pH 5.6	19% (v/v) Isopropanol; 19% (w/v) PEG 4000; 5% (v/v) Glycerol	134201-7
8	A8	0.14 M tri-Sodium citrate	0.07 M HEPES sodium salt pH 7.5	14% (v/v) Isopropanol; 30% (v/v) Glycerol	134201-8
9	A9	0.14 M tri-Sodium citrate	0.07 M Sodium cacodylate pH 6.5	21% (v/v) Isopropanol; 30% (v/v) Glycerol	134201-9
10	A10	0.18 M Magnesium chloride	0.09 M HEPES sodium salt pH 7.5	27% (v/v) Isopropanol; 10% (v/v) Glycerol	134201-10
11	A11	0.16 M Ammonium acetate	0.08 M TrisHCl pH 8.5	24% (v/v) Isopropanol; 20% (v/v) Glycerol	134201-11
12	A12	1.275 M Sodium chloride		8.5% (v/v) Ethanol; 15% (v/v) Glycerol	134201-12
13	B1		0.085 M Tris pH 8.5	17% (v/v) Ethanol; 15% (v/v) Glycerol	134201-13
14	B2			21.25% (v/v) Ethylene glycol; 15% (v/v) Glycerol	134201-14
15	B3	0.018 M Calcium chloride	0.09 M Sodium acetate pH 4.6	27% (v/v) MPD; 10% (v/v) Glycerol	134201-15
16	B4	0.17 M Sodium chloride	0.085 M Sodium acetate pH 4.6	25.5% (v/v) MPD; 15% (v/v) Glycerol	134201-16
17	B5	0.18 M Ammonium acetate	0.09 M tri-Sodium citrate pH 5.6	27% (v/v) MPD; 10% (v/v) Glycerol	134201-17
18	B6	0.18 M Magnesium acetate	0.09 M Sodium cacodylate pH 6.5	27% (v/v) MPD; 10% (v/v) Glycerol	134201-18
19	B7	0.18 M tri-Sodium citrate	0.09 M HEPES sodium salt pH 7.5	27% (v/v) MPD; 10% (v/v) Glycerol	134201-19
20	B8	0.425 M Ammonium sulfate	0.085 M HEPES pH 7.5	25.5% (v/v) MPD; 15% (v/v) Glycerol	134201-20
21	B9	0.17 M Ammonium phosphate	0.085 M Tris pH 8.5	42.5% (v/v) MPD; 15% (v/v) Glycerol	134201-21
22	B10		0.085 M HEPES pH 7.5	59.5% (v/v) MPD; 15% (v/v) Glycerol	134201-22
23	B11		0.085 M Tris pH 8.5	21.25% (v/v) tert-Butanol; 15% (v/v) Glycerol	134201-23
24	B12		0.085 M tri-Sodium citrate pH 5.6	29.75% (v/v) tert-Butanol; 15% (v/v) Glycerol	134201-24
25	C1			0.26 M Ammonium phosphate; 35% (v/v) Glycerol	134201-25
26	C2		0.07 M tri-Sodium citrate pH 5.6	0.7 M Ammonium phosphate; 30% (v/v) Glycerol	134201-26
27	C3		0.08 M TrisHCl pH 8.5	1.6 M Ammonium phosphate; 20% (v/v) Glycerol	134201-27
28	C4		0.085 M HEPES pH 7.5	1.7 M Ammonium formate; 15% (v/v) Glycerol	134201-28
29	C5		0.08 M Sodium acetate pH 4.6	1.6 M Ammonium sulfate; 20% (v/v) Glycerol	134201-29
30	C6		0.075 M TrisHCl pH 8.5	1.5 M Ammonium sulfate; 25% (v/v) Glycerol	134201-30
31	C7			1.5 M Ammonium sulfate; 25% (v/v) Glycerol	134201-31
32	C8	0.085 M Sodium chloride	0.085 M HEPES pH 7.5	1.36 M Ammonium sulfate; 15% (v/v) Glycerol	134201-32
33	C9	0.0085 M Cobalt chloride	0.085 M MES pH 6.5	1.53 M Ammonium sulfate; 15% (v/v) Glycerol	134201-33
34	C10	0.17 M K/Na tartrate	0.085 M tri-Sodium citrate pH 5.6	1.7 M Ammonium sulfate; 15% (v/v) Glycerol	134201-34
35	C11			0.85 M Imidazole pH 7.0; 15% (v/v) Glycerol	134201-35
36	C12			0.26 M K/Na tartrate; 35% (v/v) Glycerol	134201-36
37	D1		0.065 M HEPES sodium salt pH 7.5	0.52 M K/Na tartrate; 35% (v/v) Glycerol	134201-37
38	D2		0.07 M Imidazole pH 6.5	0.7 M Sodium acetate; 30% (v/v) Glycerol	134201-38
39	D3	0.0425 M Cadmium sulfate	0.085 M HEPES pH 7.5	0.85 M Sodium acetate; 15% (v/v) Glycerol	134201-39
40	D4		0.07 M Sodium cacodylate pH 6.5	0.98 M Sodium acetate; 30% (v/v) Glycerol	134201-40
41	D5		0.085 M Sodium acetate pH 4.6	1.7 M Sodium chloride; 15% (v/v) Glycerol	134201-41
42	D6	0.085 M Sodium phosphate; 0.085 M Potassium phosphate	0.085 M MES pH 6.5	1.7 M Sodium chloride; 15% (v/v) Glycerol	134201-42
43	D7		0.085 M HEPES pH 7.5	3.655 M Sodium chloride; 15% (v/v) Glycerol	134201-43
44	D8		0.09 M HEPES sodium salt pH 7.5	1.26 M tri-Sodium citrate; 10% (v/v) Glycerol	134201-44
45	D9			1.36 M tri-Sodium citrate; pH 6.5; 15% (v/v) Glycerol	134201-45
46	D10	0.6 M Sodium phosphate; 0.6 M Potassium phosphate	0.075 M HEPES sodium salt pH 7.5	25% (v/v) Glycerol	134201-46
47	D11		0.07 M Sodium acetate pH 4.6	1.4 M Sodium formate; 30% (v/v) Glycerol	134201-47
48	D12			3.6 M Sodium formate; 10% (v/v) Glycerol	134201-48



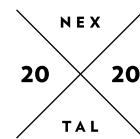
THE CRYOS SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
49	E1		0.085 M Bicine pH 9	1.7% (v/v) Dioxane; 8.5% (w/v) PEG 20000; 15% (v/v) Glycerol	134201-49
50	E2	1.36 M Ammonium sulfate	0.085 M MES pH 6.5	8.5% (v/v) Dioxane; 15% (v/v) Glycerol	134201-50
51	E3			29.75% (v/v) Dioxane; 15% (v/v) Glycerol	134201-51
52	E4	0.425 M Sodium chloride	0.085 M tri-Sodium citrate pH 5.6	1.7% (v/v) Ethylene imine polymer; 15% (v/v) Glycerol	134201-52
53	E5	1.275 M Ammonium sulfate	0.085 M Tris pH 8.5	10.2% (v/v) Glycerol; 15% (v/v) Glycerol	134201-53
54	E6	0.425 M Sodium chloride; 0.085 Magnesium chloride		0.0085 M CTAB; 15% (v/v) Glycerol	134201-54
55	E7	0.0085 M Ferric chloride	0.085 M tri-Sodium citrate pH 5.6	8.5% (v/v) Jeffamine M-600; 15% (v/v) Glycerol	134201-55
56	E8		0.085 M HEPES pH 7.5	17% (v/v) Jeffamine M-600; 15% (v/v) Glycerol	134201-56
57	E9	0.425 M Ammonium sulfate	0.085 M tri-Sodium citrate pH 5.6	0.85 M Lithium sulfate; 15% (v/v) Glycerol	134201-57
58	E10	0.0085 M Nickel chloride	0.085 M Tris pH 8.5	0.85 M Lithium sulfate; 15% (v/v) Glycerol	134201-58
59	E11		0.075 M HEPES sodium salt pH 7.5	1.125 M Lithium sulfate; 25% (v/v) Glycerol	134201-59
60	E12		0.085 M Bicine pH 9.0	1.7 M Magnesium chloride; 15% (v/v) Glycerol	134201-60
61	F1			0.17 M Magnesium formate; 15% (v/v) Glycerol	134201-61
62	F2		0.085 M MES pH 6.5	1.36 M Magnesium sulfate; 15% (v/v) Glycerol	134201-62
63	F3		0.065 M TrisHCl pH 8.5	5.2% (w/v) PEG 8000; 35% (v/v) Glycerol	134201-63
64	F4		0.085 M HEPES pH 7.5	8.5% (w/v) PEG 8000; 15% (v/v) Glycerol	134201-64
65	F5	0.4 M Lithium sulfate		12% (w/v) PEG 8000; 20% (v/v) Glycerol	134201-65
66	F6	0.16 M Zinc acetate	0.08 M Sodium cacodylate pH 6.5	14.4% (w/v) PEG 8000; 20% (v/v) Glycerol	134201-66
67	F7	0.16 M Calcium acetate	0.08 M Sodium cacodylate pH 6.5	14.4% (w/v) PEG 8000; 20% (v/v) Glycerol	134201-67
68	F8	0.16 M Magnesium acetate	0.08 M Sodium cacodylate pH 6.5	16% (w/v) PEG 8000; 20% (v/v) Glycerol	134201-68
69	F9	0.04 M Potassium phosphate		16% (w/v) PEG 8000; 20% (v/v) Glycerol	134201-69
70	F10	0.17 M Ammonium sulfate	0.085 M Sodium cacodylate pH 6.5	25.5% (w/v) PEG 8000; 15% (v/v) Glycerol	134201-70
71	F11	0.17 M Sodium acetate	0.085 M Sodium cacodylate pH 6.5	25.5% (w/v) PEG 8000; 15% (v/v) Glycerol	134201-71
72	F12	0.17 M Ammonium sulfate		25.5% (w/v) PEG 8000; 15% (v/v) Glycerol	134201-72
73	G1	1.7 M Ammonium sulfate	0.085 M HEPES sodium salt pH 7.5	1.7% (v/v) PEG 400; 15% (v/v) Glycerol	134201-73
74	G2	0.19 M Calcium chloride	0.095 M HEPES sodium salt pH 7.5	26.6% (v/v) PEG 400; 5% (v/v) Glycerol	134201-74
75	G3	0.085 M Cadmium chloride	0.085 M Sodium acetate pH 4.6	25.5% (v/v) PEG 400; 15% (v/v) Glycerol	134201-75
76	G4	0.18 M Magnesium chloride	0.09 M HEPES sodium salt pH 7.5	27% (v/v) PEG 400; 10% (v/v) Glycerol	134201-76
77	G5	0.18 M tri-Sodium citrate	0.09 M TrisHCl pH 8.5	27% (v/v) PEG 400; 10% (v/v) Glycerol	134201-77
78	G6	0.085 M Sodium chloride	0.085 M Bicine pH 9.0	17% (w/v) PEG 550 MME; 15% (v/v) Glycerol	134201-78
79	G7	0.0085 M Zinc sulfate	0.085 M MES pH 6.5	21.25% (w/v) PEG 550 MME; 15% (v/v) Glycerol	134201-79
80	G8			8.5% (w/v) PEG 1000; 8.5% (w/v) PEG 8000, 15% (v/v) Glycerol	134201-80
81	G9			24% (w/v) PEG 1500; 20% (v/v) Glycerol	134201-81
82	G10	0.0085 M Nickel chloride	0.085 M Tris pH 8.5	17% (w/v) PEG 2000 MME; 15% (v/v) Glycerol	134201-82
83	G11	0.17 M Ammonium sulfate	0.085 M Sodium acetate pH 4.6	25.5% (w/v) PEG 2000 MME; 15% (v/v) Glycerol	134201-83
84	G12		0.07 M Sodium acetate pH 4.6	5.6% (w/v) PEG 4000; 30% (v/v) Glycerol	134201-84
85	H1	0.16 M Ammonium sulfate	0.08 M Sodium acetate pH 4.6	20% (w/v) PEG 4000; 20% (v/v) Glycerol	134201-85
86	H2	0.17 M Ammonium acetate	0.085 M Sodium acetate pH 4.6	25.5% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-86
87	H3	0.17 M Ammonium acetate	0.085 M tri-Sodium citrate pH 5.6	25.5% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-87
88	H4	0.16 M Magnesium chloride	0.08 M TrisHCl pH 8.5	24% (w/v) PEG 4000; 20% (v/v) Glycerol	134201-88
89	H5	0.17 M Lithium sulfate	0.085 M TrisHCl pH 8.5	25.5% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-89
90	H6	0.17 M Sodium acetate	0.085 M TrisHCl pH 8.5	25.5% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-90
91	H7	0.17 M Ammonium sulfate		25.5% (w/v) PEG 4000; 15% (v/v) Glycerol	134201-91
92	H8	0.17 M Ammonium sulfate	0.085 M MES pH 6.5	25.5% (w/v) PEG 5000 MME; 15% (v/v) Glycerol	134201-92
93	H9		0.085 M HEPES pH 7.5	8.5% (w/v) PEG 6000; 4.25% (v/v) MPD; 15% (v/v) Glycerol	134201-93
94	H10	1.6 M Sodium chloride		8% (w/v) PEG 6000; 20% (v/v) Glycerol	134201-94
95	H11		0.085 M HEPES pH 7.5	17% (w/v) PEG 10000; 6.8% (v/v) Ethylene glycol; 15% (v/v) Glycerol	134201-95
96	H12		0.085 M MES pH 6.5	10.2% (w/v) PEG 20000; 15% (v/v) Glycerol	134201-96



Other NeXtal Crystallization Screens Available

- The Classics Suite
- The Classics Lite Suite
- The Classics II Suite
- The Cryos Suite
- The PEGs Suite
- The AmSO₄ 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



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