



# *THE MBCLASS SUITE*

**FOR SCREENING OF PROTEIN CRYSTALLIZATION CONDITIONS**



## **The MBClass Suite provides:**

- A ready-to-use kit format to which only protein needs to be added, for easy and fast screening
- Perfect conditions for identification of membrane proteins
- 96 precisely defined chemical solutions containing the most successful conditions from literature

The MbClass 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.

● Fast, simple, consistent crystallography. **NO SURPRISES**



**NeXtal**

## THE MBCLASS SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	100 ml Refill SKU
1	A1	0.1 M Sodium citrate	0.1 M Sodium citrate pH 5.6	10% (v/v) Isopropanol		135001-01
2	A2	0.1 M Sodium chloride	0.1 M Sodium acetate pH 4.6	12% (v/v) Isopropanol		135001-02
3	A3	0.2 M Calcium chloride	0.1 M Sodium acetate pH 4.6	30% (w/v) Isopropanol; 20% (w/v) Glycerol		135001-03
4	A4		0.1 M TRIS.HCl pH 8.5	0.5 M Ammonium sulfate		135001-04
5	A5		1M Sodium/Potassium phosphate pH 7.5	0.7 M Ammonium sulfate		135001-05
6	A6		0.1 M ADA pH 6.5	1.0 M Ammonium sulfate		135001-06
7	A7		0.1 M TRIS.HCl pH 8.5	1.2 M Ammonium sulfate		135001-07
8	A8	0.1 M Ammonium acetate		1.4M Ammonium sulfate; 4% (w/v) Isopropanol		135001-08
9	A9		0.1 M Sodium citrate pH 5.6	2.0 M Ammonium sulfate		135001-09
10	A10	0.25 M Sodium chloride	0.05 M Na/K phosphate pH 7.5	3.5 M Ammonium sulfate		135001-10
11	A11		0.1 M ADA pH 6.5	1.0 M di-Ammonium phosphate		135001-11
12	A12	0.1 M Ammonium sulfate	0.1 M HEPES sodium salt pH 7.5	0.5 M di-Sodium phosphate; 0.5 M di-Potassium phosphate		135001-12
13	B1	0.1 M di-Ammonium phosphate	0.1 M TRIS.HCl pH 8.5	0.5 M di-Sodium phosphate; 0.5 M di-Potassium phosphate		135001-13
14	B2	0.5 M Lithium chloride		1.0 M Sodium citrate	5.6	135001-14
15	B3		0.1 M TRIS.HCl pH 8.5	0.2 M Lithium sulfate		135001-15
16	B4	0.1 M Potassium/Sodium tartrate	0.1 M TRIS.HCl pH 8.5	0.4 M Magnesium sulfate		135001-16
17	B5	0.1 M Magnesium chloride	0.1 M Sodium citrate pH 5.6	4% (v/v) MPD		135001-17
18	B6	0.6 M Magnesium sulfate	0.1 M HEPES sodium salt pH 7.5	4% (v/v) MPD		135001-18
19	B7	0.1 M Sodium chloride	0.1 M Sodium acetate pH 4.6	12% (v/v) MPD		135001-19
20	B8	0.1 M Sodium chloride	0.1 M Sodium citrate pH 5.6	12% (v/v) MPD		135001-20
21	B9		0.1 M ADA pH 6.5	12% (v/v) MPD		135001-21
22	B10	0.1 M Sodium citrate	0.1 M HEPES sodium salt pH 7.5	12% (v/v) MPD		135001-22
23	B11	0.1 M Lithium sulfate	0.1 M TRIS.HCl pH 8.5	12% (v/v) MPD		135001-23
24	B12	0.1 M Sodium chloride	0.1 M TRIS.HCl pH 8.5	12% (v/v) MPD		135001-24
25	C1		0.1 M Bis-TRIS Propane pH 7.0	25% (w/v) MPD		135001-25
26	C2		0.3 M Sodium citrate pH 5.6	30% (w/v) MPD		135001-26
27	C3	0.1 M Lithium sulfate	0.1 M Sodium citrate pH 5.6	4% (v/v) PEG 400		135001-27
28	C4	0.3 M Lithium sulfate	0.1 M ADA pH 6.5	4% (v/v) PEG 400		135001-28
29	C5	0.6 M Magnesium sulfate	0.1 M HEPES sodium salt pH 7.5	4% (v/v) PEG 400		135001-29
30	C6	0.1 M Sodium citrate	0.1 M TRIS.HCl pH 8.5	5% (v/v) PEG 400		135001-30
31	C7	0.2 M Calcium chloride	0.1 M HEPES sodium salt pH 7.5	15% (w/v) PEG 400; 15% (w/v) Glycerol		135001-31
32	C8	0.1 M Magnesium chloride	0.1 M Sodium acetate pH 4.6	18% (v/v) PEG 400		135001-32
33	C9	0.1 M Sodium chloride	0.1 M Sodium citrate pH 5.6	18% (v/v) PEG 400		135001-33
34	C10	0.1 M Magnesium chloride	0.1 M HEPES sodium salt pH 7.5	18% (v/v) PEG 400		135001-34
35	C11	0.1 M Ammonium sulfate	0.1 M HEPES sodium salt pH 7.5	18% (v/v) PEG 400		135001-35
36	C12	0.05 M Magnesium acetate	0.05 M Sodium acetate pH 4.6	25% (w/v) PEG 400		135001-36
37	D1	0.05 M Sodium sulfate; 0.05 M Lithium sulfate	0.05 M TRIS.HCl pH 8.5	30% (w/v) PEG 400		135001-37
38	D2	0.2 M Calcium chloride	0.1 M HEPES sodium salt pH 7.5	48% (w/v) PEG 400		135001-38
39	D3		0.01 M TRIS.HCl pH 7.5	20% (w/v) PEG 550 MME		135001-39
40	D4	0.1 M Magnesium chloride	0.05 M TRIS.HCl pH 8.5	30% (w/v) PEG 550 MME		135001-40
41	D5			35% (w/v) PEG 600		135001-41
42	D6	0.35 M Sodium chloride	0.1 M Tricine pH 8.0	28% (w/v) PEG 1000; 10% (w/v) Glycerol		135001-42
43	D7	0.1 M Magnesium chloride; 0.1 M Sodium chloride		10% (w/v) PEG 1500; 5% (w/v) Ethanol		135001-43
44	D8			5% (w/v) PEG 2000		135001-44
45	D9	0.5 M Magnesium chloride	0.05 M TRIS.HCl pH 8.5	10% (w/v) PEG 2000		135001-45
46	D10	0.02 M Sodium citrate	0.1 M Sodium dihydrogen phosphate pH 6.2	15% (w/v) PEG 2000		135001-46
47	D11	0.5 M Sodium chloride	0.1 M Sodium dihydrogen phosphate pH 6.8	15% (w/v) PEG 2000		135001-47

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#	Well	Salt	Buffer	Precipitant	Final pH	100 ml Refill SKU
48	D12		0.02 M Bis-TRIS propane pH 7.0	15% (w/v) PEG 2000		135001-48
49	E1	0.1 M Magnesium chloride	0.05 M HEPES sodium salt pH 7.5	15% (w/v) PEG 2000		135001-49
50	E2			15% (w/v) PEG 2000		135001-50
51	E3	0.1 M Lithium chloride		15% (w/v) PEG 2000		135001-51
52	E4	0.3 M Magnesium nitrate	0.1 M TRIS.HCl pH 8.0	20% (w/v) PEG 2000; 2% (w/v) MPD		135001-52
53	E5	0.3 M Magnesium chloride	0.1 M BICINE pH 9.0	25% (w/v) PEG 2000; 15% (w/v) Glycerol		135001-53
54	E6		0.1 M Sodium acetate pH 4.6	8% (w/v) PEG 2000 MME		135001-54
55	E7		0.1 M Sodium citrate pH 5.6	10% (w/v) PEG 2000 MME; 3% (w/v) PEG 200; 20% (w/v) Glycerol		135001-55
56	E8	0.5 M Sodium chloride	0.05 M TRIS.HCl pH 7.5	12% (w/v) PEG 2000 MME		135001-56
57	E9	0.15 M Sodium chloride	0.05 M Sodium citrate pH 5.6	10% (w/v) PEG 3350		135001-57
58	E10		0.05 M TRIS.HCl pH 7.5	2% (w/v) PEG 4000		135001-58
59	E11	0.1 M Sodium chloride	0.05 M MES sodium salt pH 6.5	5% (w/v) PEG 4000; 10% (w/v) glycerol		135001-59
60	E12		0.05 M Sodium phosphate pH 6.7	5% (w/v) PEG 4000		135001-60
61	F1			5% (w/v) PEG 4000		135001-61
62	F2	0.1 M Potassium chloride		5% (w/v) PEG 4000		135001-62
63	F3	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	10% (w/v) PEG 4000		135001-63
64	F4	0.1 M Sodium chloride	0.1 M HEPES sodium salt pH 7.5	10% (w/v) PEG 4000		135001-64
65	F5	0.1 M Ammonium sulfate	0.1 M HEPES sodium salt pH 7.5	10% (w/v) PEG 4000		135001-65
66	F6	0.5 M Sodium chloride	0.05 M TRIS.HCl pH 8.5	10% (w/v) PEG 4000		135001-66
67	F7	0.1 M Lithium sulfate	0.1 M ADA pH 6.5	12% (w/v) PEG 4000		135001-67
68	F8	0.1 M Lithium sulfate	0.1 M ADA pH 6.5	12% (w/v) PEG 4000; 2% (v/v) Isopropanol		135001-68
69	F9		0.05 M Sodium phosphate pH 6.8	12% (w/v) PEG 4000		135001-69
70	F10	0.5 M Potassium chloride	0.05 M MOPS pH 7.0	12% (w/v) PEG 4000; 20% (w/v) Glycerol		135001-70
71	F11	0.1 M Lithium chloride	0.01 M TRIS.HCl pH 7.5	15% (w/v) PEG 4000		135001-71
72	F12	0.5 M Sodium chloride	0.1 M Bis-TRIS propane pH 7.0	20% (w/v) PEG 4000		135001-72
73	G1	0.5 M Sodium chloride	0.1 M Sodium phosphate pH 7.0	20% (w/v) PEG 4000		135001-73
74	G2	0.15 M Zinc acetate; 0.05 M Zinc chloride	0.05 M TRIS.HCl pH 7.5	20% (w/v) PEG 4000		135001-74
75	G3		0.05 M Tricine pH 8.0	22% (w/v) PEG 4000		135001-75
76	G4	0.5 M Sodium chloride	0.05 M TRIS.HCl pH 8.5	22% (w/v) PEG 4000		135001-76
77	G5			30% (w/v) PEG 4000		135001-77
78	G6	0.1 M Magnesium acetate	0.1 M Sodium citrate pH 5.6	10% (w/v) PEG 5000 MME		135001-78
79	G7	0.1 M Magnesium sulfate		5% (w/v) PEG 6000		135001-79
80	G8	0.15 M Zinc acetate; 0.05 M Zinc chloride	0.05 M TRIS.HCl pH 7.5	10% (w/v) PEG 6000		135001-80
81	G9	0.1 M Lithium sulfate	0.1 M Sodium citrate pH 5.6	12% (w/v) PEG 6000		135001-81
82	G10	0.15 M Sodium chloride	0.1 M TRIS.HCl pH 8.5	12% (w/v) PEG 6000		135001-82
83	G11		0.05 M Sodium succinate pH 6.5	15% (w/v) PEG 6000		135001-83
84	G12	0.025 M Potassium phosphate		12% (w/v) PEG 8000; 10% (w/v) MPD		135001-84
85	H1	0.1 M Magnesium acetate	0.1 M Sodium citrate pH 5.6	8% (w/v) PEG 10000		135001-85
86	H2			0.05 M Potassium phosphate pH 8.0		135001-86
87	H3			1.5 M Potassium phosphate pH 7.0		135001-87
88	H4	0.1 M Lithium sulfate	0.1 M HEPES sodium salt pH 7.5	0.1 M Potassium/Sodium tartrate		135001-88
89	H5		0.1 M TRIS.HCl pH 8.5	0.1 M Sodium acetate		135001-89
90	H6		0.1 M Sodium citrate pH 5.6	0.1 M Sodium chloride		135001-90
91	H7		0.1 M TRIS.HCl pH 8.5	0.1 M Sodium chloride		135001-91
92	H8		0.1 M Sodium acetate pH 4.6	1.5 M Sodium chloride		135001-92
93	H9	0.1 M Sodium formate		2.0 M Sodium chloride		135001-93
94	H10			0.1 M Sodium citrate pH 4.8		135001-94
95	H11		0.1 M HEPES sodium salt pH 7.5	1.0 M Sodium citrate		135001-95
96	H12			1.0 M Sodium citrate		135001-96

### Other NeXtal Crystallization Screens Available

- The Classics Suite
- The Classics Lite Suite
- The Classics II Suite
- The Cryos Suite
- The PEGs Suite
- The AmSO<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 CompPAS Suite
- The PACT Suite
- The Nucleix Suite
- The JCSG+ Suite
- The JCSG Core I-IV Suites
- The Opti-Salts Suite



 Fast, simple, consistent crystallography. **NO SURPRISES**

#### NeXtal Biotechnologies

6201 Trust Drive  
Holland, OH 43528

**P:** +1.419.794.7890  
**F:** +1.419.491.1002

**W:** [nextalbiotech.com](http://nextalbiotech.com)  
**E:** [customerservice@nextalbiotech.com](mailto:customerservice@nextalbiotech.com)



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