

THE AmSO₄ SUITE

FOR SCREENING OF PROTEIN CRYSTALLIZATION CONDITIONS



The AmSO₄ Suite provides:

- A ready-to-use kit format to which only protein needs to be added, for easy and fast screening
- 96 precisely defined chemical solutions containing ammonium sulfate as precipitant
- A precipitant that dehydrates the protein by competing with water molecules at its surface and thereby promoting the formation of macromolecular crystals
- A first set of solutions (conditions 1 – 48) containing AmSO₄ in combination with 48 different salts known to be effective as co-crystallizers. This set allows the identification of suitable combinations of AmSO₄ and salts to promote nucleation and crystal growth.
- A second set of solutions (conditions 49 – 72) containing different concentrations of AmSO₄ in combination with various pH conditions in a 4 x 6 grid format to precisely define the effect of these factors.
- A third set (conditions 73 – 96) with the most popular solutions from the BMCD enabling screening for different combinations of co-precipitant, salts, and buffers that proved to be successful for other proteins.
- An intermediate step between results received from an AmSO₄ containing suite (e.g., The Classics Suite) and before a narrower refinement

The AmSO₄ 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**



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THE AMSO_4 SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
1	A1			2.2 M Ammonium sulfate	134401-1
2	A2	0.2 M Ammonium acetate		2.2 M Ammonium sulfate	134401-2
3	A3	0.2 M Ammonium chloride		2.2 M Ammonium sulfate	134401-3
4	A4	0.2 M Ammonium phosphate		2.2 M Ammonium sulfate	134401-4
5	A5	0.2 M Ammonium fluoride		2.2 M Ammonium sulfate	134401-5
6	A6	0.2 M Ammonium formate		2.2 M Ammonium sulfate	134401-6
7	A7	0.18 M tri-Ammonium citrate		2.2 M Ammonium sulfate	134401-7
8	A8	0.2 M di-Ammonium phosphate		2.2 M Ammonium sulfate	134401-8
9	A9	0.2 M Ammonium iodide		2.2 M Ammonium sulfate	134401-9
10	A10	0.2 M Ammonium nitrate		2.2 M Ammonium sulfate	134401-10
11	A11	0.2 M di-Ammonium tartrate		2.2 M Ammonium sulfate	134401-11
12	A12	0.2 M Cadmium chloride		2.2 M Ammonium sulfate	134401-12
13	B1	0.2 M Cadmium sulfate		2.2 M Ammonium sulfate	134401-13
14	B2	0.2 M Cesium chloride		2.2 M Ammonium sulfate	134401-14
15	B3	0.2 M Cesium sulfate		2.2 M Ammonium sulfate	134401-15
16	B4	0.2 M Ammonium bromide		2.2 M Ammonium sulfate	134401-16
17	B5	0.2 M Lithium acetate		2.2 M Ammonium sulfate	134401-17
18	B6	0.2 M Lithium chloride		2.2 M Ammonium sulfate	134401-18
19	B7	0.2 M tri-Lithium citrate		2.2 M Ammonium sulfate	134401-19
20	B8	0.2 M Lithium nitrate		2.2 M Ammonium sulfate	134401-20
21	B9	0.2 M Lithium sulfate		2.2 M Ammonium sulfate	134401-21
22	B10	0.2 M Potassium acetate		2.2 M Ammonium sulfate	134401-22
23	B11	0.2 M Potassium bromide		2.2 M Ammonium sulfate	134401-23
24	B12	0.2 M Potassium chloride		2.2 M Ammonium sulfate	134401-24
25	C1	0.2 M tri-Potassium citrate		2.2 M Ammonium sulfate	134401-25
26	C2	0.2 M Potassium phosphate		2.2 M Ammonium sulfate	134401-26
27	C3	0.2 M Potassium fluoride		2.2 M Ammonium sulfate	134401-27
28	C4	0.2 M Potassium formate		2.2 M Ammonium sulfate	134401-28
29	C5	0.2 M di-Potassium phosphate		2.2 M Ammonium sulfate	134401-29
30	C6	0.2 M Potassium iodide		2.2 M Ammonium sulfate	134401-30
31	C7	0.2 M Potassium nitrate		2.2 M Ammonium sulfate	134401-31
32	C8	0.2 M K/Na tartrate		2.2 M Ammonium sulfate	134401-32
33	C9	0.2 M Potassium sulfate		2.2 M Ammonium sulfate	134401-33
34	C10	0.2 M Potassium thiocyanate		2.2 M Ammonium sulfate	134401-34
35	C11	0.2 M Sodium acetate		2.2 M Ammonium sulfate	134401-35
36	C12	0.2 M Sodium bromide		2.2 M Ammonium sulfate	134401-36
37	D1	0.2 M Sodium chloride		2.2 M Ammonium sulfate	134401-37
38	D2	0.2 M tri-Sodium citrate		2.2 M Ammonium sulfate	134401-38
39	D3	0.2 M Sodium phosphate		2.2 M Ammonium sulfate	134401-39
40	D4	0.2 M Sodium fluoride		2.2 M Ammonium sulfate	134401-40
41	D5	0.2 M Sodium formate		2.2 M Ammonium sulfate	134401-41
42	D6	0.2 M di-Sodium phosphate		2.2 M Ammonium sulfate	134401-42
43	D7	0.2 M Sodium iodide		2.2 M Ammonium sulfate	134401-43
44	D8	0.2 M Sodium malonate		2.2 M Ammonium sulfate	134401-44
45	D9	0.2 M Sodium nitrate		2.2 M Ammonium sulfate	134401-45
46	D10	0.2 M Sodium sulfate		2.2 M Ammonium sulfate	134401-46
47	D11	0.2 M di-Sodium tartrate		2.2 M Ammonium sulfate	134401-47
48	D12	0.2 M Sodium thiocyanate		2.2 M Ammonium sulfate	134401-48



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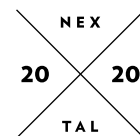
THE AMSO₄ SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	100 ml Refill SKU
49	E1		0.1 M Citric acid pH 4.0	0.8 M Ammonium sulfate	134401-49
50	E2		0.1 M Citric acid pH 5.0	0.8 M Ammonium sulfate	134401-50
51	E3		0.1 M MES pH 6.0	0.8 M Ammonium sulfate	134401-51
52	E4		0.1 M HEPES pH 7.0	0.8 M Ammonium sulfate	134401-52
53	E5		0.1 M Tris pH 8.0	0.8 M Ammonium sulfate	134401-53
54	E6		0.1 M Bicine pH 9.0	0.8 M Ammonium sulfate	134401-54
55	E7		0.1 M Citric acid pH 4.0	1.6 M Ammonium sulfate	134401-55
56	E8		0.1 M Citric acid pH 5.0	1.6 M Ammonium sulfate	134401-56
57	E9		0.1 M MES pH 6.0	1.6 M Ammonium sulfate	134401-57
58	E10		0.1 M HEPES pH 7.0	1.6 M Ammonium sulfate	134401-58
59	E11		0.1 M Tris pH 8.0	1.6 M Ammonium sulfate	134401-59
60	E12		0.1 M Bicine pH 9.0	1.6 M Ammonium sulfate	134401-60
61	F1		0.1 M Citric acid pH 4.0	2.4 M Ammonium sulfate	134401-61
62	F2		0.1 M Citric acid pH 5.0	2.4 M Ammonium sulfate	134401-62
63	F3		0.1 M MES pH 6.0	2.4 M Ammonium sulfate	134401-63
64	F4		0.1 M HEPES pH 7.0	2.4 M Ammonium sulfate	134401-64
65	F5		0.1 M Tris pH 8.0	2.4 M Ammonium sulfate	134401-65
66	F6		0.1 M Bicine pH 9.0	2.4 M Ammonium sulfate	134401-66
67	F7		0.1 M Citric acid pH 4.0	3.2 M Ammonium sulfate	134401-67
68	F8		0.1 M Citric acid pH 5.0	3.2 M Ammonium sulfate	134401-68
69	F9		0.1 M MES pH 6.0	3.2 M Ammonium sulfate	134401-69
70	F10		0.1 M HEPES pH 7.0	3.2 M Ammonium sulfate	134401-70
71	F11		0.1 M Tris pH 8.0	3.2 M Ammonium sulfate	134401-71
72	F12		0.1 M Bicine pH 9.0	3.2 M Ammonium sulfate	134401-72
73	G1	0.1 M tri-Sodium citrate		0.5 M Ammonium sulfate; 1.0 M Lithium Sulfate	134401-73
74	G2			1.0 M Ammonium sulfate	134401-74
75	G3		0.1 M Sodium acetate pH 4.6	1.0 M Ammonium sulfate	134401-75
76	G4		0.1 M HEPES sodium salt pH 7.5	1.0 M Ammonium sulfate; 2% (w/v) PEG 400	134401-76
77	G5		0.1 M Tris-HCl pH 8.5	1.0 M Ammonium sulfate	134401-77
78	G6	0.05 M tri-Sodium citrate		1.2 M Ammonium sulfate; 3% (w/v) Isopropanol	134401-78
79	G7		0.1 M Tris-HCl pH 8.5	1.5 M Ammonium sulfate; 15% (w/v) Glycerol	134401-79
80	G8	0.5 M Lithium chloride		1.6 M Ammonium sulfate	134401-80
81	G9	1.0 M Lithium sulfate		1.6 M Ammonium sulfate	134401-81
82	G10	0.2 M Sodium chloride	0.1 M HEPES sodium salt pH 7.5	1.6 M Ammonium sulfate	134401-82
83	G11		0.1 M HEPES sodium salt pH 7.5	1.6 M Ammonium sulfate; 2% (w/v) PEG 1000	134401-83
84	G12		0.1 M MES sodium salt pH 6.5	1.8 M Ammonium sulfate	134401-84
85	H1	2.0 M Sodium chloride		2.0 M Ammonium sulfate	134401-85
86	H2		0.1 M Sodium acetate pH 4.6	2.0 M Ammonium sulfate	134401-86
87	H3		0.1 M MES sodium salt pH 6.5	2.0 M Ammonium sulfate; 5% (w/v) PEG 400	134401-87
88	H4		0.1 M Tris-HCl pH 8.5	2.0 M Ammonium sulfate	134401-88
89	H5			2.2 M Ammonium sulfate	134401-89
90	H6			2.2 M Ammonium sulfate; 20% (w/v) Glycerol	134401-90
91	H7	0.1 M tri-Sodium citrate		2.4 M Ammonium sulfate	134401-91
92	H8			3.0 M Ammonium sulfate; 1% (w/v) MPD	134401-92
93	H9			3.0 M Ammonium sulfate; 10% (w/v) Glycerol	134401-93
94	H10		0.1 M HEPES sodium salt pH 7.5	3.5 M Ammonium sulfate	134401-94
95	H11		0.1 M MES sodium salt pH 6.5	3.5 M Ammonium sulfate; 1% (w/v) MPD	134401-95
96	H12			3.5 M Ammonium sulfate	134401-96



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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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



NeXtal