

THE JCSG CORE 1 SUITE

FOR INITIAL SCREENING USING AN OPTIMIZED SET OF CONDITIONS



The JCSG Core Suites provide:

- Conditions giving the highest hit rates at the Joint Center for Structural Genomics
- Optimized suites based on over half a million crystallization trials
- Maximized reproducibility through online access to production reports

The JCSG Core Suites - split into four screens of 96 unique conditions - are the result of analyzing over 500,000 high-throughput crystallization experiments performed at the JCSG (1). The 384 crystallization conditions that provided the highest hit rates in initial screening were chosen to form the screens.

The JCSG Core Suites are 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. P Lesley, S.A., and Wilson, I.A. (2005) Protein production and crystallization at the joint center for structural genomics. *J. Struct. Funct. Genomics.* 6, 71.

THE JCSG CORE I SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
1	A1		0.1 M CHES pH 9.5	20% (w/v) PEG 8000		136201-01
2	A2		0.1 M Bicine pH 8.5	20% (w/v) PEG 6000	9.0	136201-02
3	A3	0.05 M Lithium sulfate; 0.05 M Sodium sulfate	0.05 M Tris-HCl pH 8.5	30% (w/v) PEG 400		136201-03
4	A4	0.2 M Ammonium dihydrogen phosphate	0.1 M Tris pH 8.5	50% (v/v) MPD		136201-04
5	A5	0.2 M Magnesium chloride	0.1 M Tris pH 8.5	3.4 M 1,6 Hexanediol		136201-05
6	A6	0.05 M Magnesium chloride	0.1M Tris pH 8.5	40% (v/v) Ethanol		136201-06
7	A7		0.2 M tri-Potassium citrate	20% (w/v) PEG 3350		136201-07
8	A8		0.2 M tri-Sodium citrate	20% (w/v) PEG 3350		136201-08
9	A9		0.2 M tri-Lithium citrate	20% (w/v) PEG 3350		136201-09
10	A10	0.2 M Calcium acetate	0.1 M Imidazole pH 8.0	20% PEG 1000		136201-10
11	A11		0.2 M Potassium acetate	20% (w/v) PEG 3350		136201-11
12	A12		0.2 M Magnesium acetate	20% (w/v) PEG 3350		136201-12
13	B1	0.2 M Sodium chloride	0.1 M HEPES pH 7.5	20% (w/v) PEG 3000		136201-13
14	B2		0.1 M HEPES pH 7.5	20% (w/v) PEG 8000		136201-14
15	B3		0.1 M HEPES pH 7.5	10% (w/v) PEG 8000		136201-15
16	B4	0.19 M Calcium chloride	0.095 M HEPES pH 7.5	26.6% (v/v) PEG 400; 5% (v/v) Glycerol		136201-16
17	B5		0.1 M HEPES pH 7.5	20% (w/v) PEG 4000; 10% (v/v) Isopropanol		136201-17
18	B6	0.8 M di-Sodium hydrogen phosphate; 0.8 M di-Potassium hydrogen phosphate	0.1 M HEPES pH 7.5			136201-18
19	B7	0.2 M di-Sodium tartrate		20% (w/v) PEG 3350		136201-19
20	B8	0.2 M Calcium acetate hydrate		20% (w/v) PEG 3350		136201-20
21	B9	0.2 M Potassium formate		20% (w/v) PEG 3350		136201-21
22	B10	0.2 M Potassium Sodium tartrate		20% (w/v) PEG 3350		136201-22
23	B11	0.2 M Sodium formate		20% (w/v) PEG 3350		136201-23
24	B12	0.2 M Potassium fluoride		20% (w/v) PEG 3350		136201-24
25	C1	0.2 M Ammonium acetate		20% (w/v) PEG 3350		136201-25
26	C2	0.2 M Lithium nitrate		20% (w/v) PEG 3350		136201-26
27	C3		0.1M Sodium cacodylate pH 6.5	5% (w/v) PEG 8000; 40% (v/v) MPD		136201-27
28	C4	0.2 M Magnesium chloride	0.1 M Tris pH 7.0	10% (w/v) PEG 8000		136201-28
29	C5	0.2 M Calcium acetate	0.1 M Tris pH 7.0	20% (w/v) PEG 3000		136201-29
30	C6	0.2 M Magnesium chloride	0.1 M Tris pH 7.0	2.5 M Sodium chloride		136201-30
31	C7		0.1 M Tris pH 7.0	20% (w/v) PEG 2000 MME		136201-31
32	C8	0.2 M Sodium acetate		20% (w/v) PEG 3350		136201-32
33	C9	0.2 M Potassium thiocyanate		20% (w/v) PEG 3350		136201-33
34	C10		0.1 M HEPES pH 6.5	20% (w/v) PEG 6000	7.0	136201-34
35	C11	0.2 M Potassium nitrate		20% (w/v) PEG 3350		136201-35
36	C12	0.2 M Sodium thiocyanate		20% (w/v) PEG 3350		136201-36
37	D1	0.2 M Sodium iodide		20% (w/v) PEG 3350		136201-37
38	D2	0.2 M Potassium chloride		20% (w/v) PEG 3350		136201-38
39	D3	0.2 M Sodium chloride		20% (w/v) PEG 3350		136201-39
40	D4	0.2 M Potassium iodide		20% (w/v) PEG 3350		136201-40
41	D5	0.2 M Lithium chloride		20% (w/v) PEG 3350		136201-41
42	D6	0.2 M Magnesium chloride	0.1M Sodium cacodylate pH 6.5	50% (v/v) PEG 200		136201-42
43	D7	0.2 M di-Ammonium tartrate		20% (w/v) PEG 3350		136201-43
44	D8	0.2 M Sodium sulfate		20% (w/v) PEG 3350		136201-44
45	D9	0.2 M Ammonium formate		20% (w/v) PEG 3350		136201-45
46	D10		0.1 M HEPES pH 7.5	10% (w/v) PEG 6000; 5% (v/v) MPD		136201-46
47	D11		1.6 M Sodium citrate pH 6.5			136201-47
48	D12	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	20% (w/v) PEG 8000		136201-48



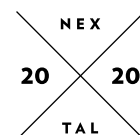
THE JCSG CORE I SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
49	E1	0.2 M Ammonium nitrate		20% (w/v) PEG 3350		136201-49
50	E2	0.2 M Ammonium chloride		20% (w/v) PEG 3350		136201-50
51	E3	0.2 M Sodium chloride	0.1 M Na/K phosphate pH 6.2	10% (w/v) PEG 8000		136201-51
52	E4	0.2 M Ammonium iodide		20% (w/v) PEG 3350		136201-52
53	E5	0.2 M Ammonium fluoride		20% (w/v) PEG 3350		136201-53
54	E6		0.1M MES pH 6.0	5% (w/v) PEG 3000; 5% (v/v) MPD		136201-54
55	E7	0.2 M Calcium acetate	0.1 M MES pH 6.0	20% (w/v) PEG 8000		136201-55
56	E8	0.2 M Lithium sulfate	0.1 M MES pH 6.0	35% (v/v) MPD		136201-56
57	E9	0.2 M Ammonium sulfate		20% (w/v) PEG 3350		136201-57
58	E10		0.1 M MES pH 5.0	40% (v/v) MPD	6.0	136201-58
59	E11		0.1 M MES pH 5.0	20% (v/v) MPD	6.0	136201-59
60	E12		0.1 M MES pH 5.0	20% (w/v) PEG 6000	6.0	136201-60
61	F1		0.1 M MES pH 5.0	10% (w/v) PEG 6000	6.0	136201-61
62	F2	0.2 M Magnesium sulfate		20% (w/v) PEG 3350		136201-62
63	F3	0.2 M Magnesium formate		20% (w/v) PEG 3350		136201-63
64	F4	0.2 M Magnesium nitrate		20% (w/v) PEG 3350		136201-64
65	F5	0.2 M Magnesium chloride		20% (w/v) PEG 3350		136201-65
66	F6		0.095 M Sodium citrate pH 5.6	19% (v/v) Isopropanol; 19% (w/v) PEG 4000; 5% (v/v) Glycerol		136201-66
67	F7		0.1 M Sodium citrate pH 5.6	20% (v/v) Isopropanol; 20% (w/v) PEG 4000		136201-67
68	F8		0.1 M Sodium citrate pH 5.5	20% (w/v) PEG 3000		136201-68
69	F9	0.2 M Sodium chloride	0.1M Phosphate-citrate pH 4.2	50% (v/v) PEG 200		136201-69
70	F10		0.1M Phosphate-citrate pH 4.2	5% (w/v) PEG 1000; 40% Ethanol		136201-70
71	F11	0.2 M Lithium sulfate	0.1M Sodium acetate pH 4.5	50% (v/v) PEG 400		136201-71
72	F12		0.1M Phosphate-citrate pH 4.2	40% (v/v) MPD		136201-72
73	G1		0.18 M tri-Ammonium citrate	20% (w/v) PEG 3350		136201-73
74	G2		0.1 M Sodium acetate pH 5.0	20% (v/v) MPD		136201-74
75	G3	1.0 M Lithium chloride	0.1 M Citric Acid pH 5.0	10% (w/v) PEG 6000	5.0	136201-75
76	G4		0.1 M Citric Acid pH 4.0	20% (w/v) PEG 6000	5.0	136201-76
77	G5		0.1 M Citric Acid	10% (w/v) PEG 6000	5.0	136201-77
78	G6		0.1 M Citric Acid pH 4.0	5% (w/v) PEG 6000	5.0	136201-78
79	G7	0.2 M Potassium dihydrogen phosphate		20% (w/v) PEG 3350		136201-79
80	G8	0.2 M Ammonium dihydrogen phosphate		20% (w/v) PEG 3350		136201-80
81	G9	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	30% (w/v) PEG 2000 MME		136201-81
82	G10		0.1 M Sodium acetate pH 4.6	8% (w/v) PEG 4000		136201-82
83	G11	0.2 M Ammonium sulfate	0.1 M Sodium acetate pH 4.6	25% (w/v) PEG 4000		136201-83
84	G12	0.02 M Calcium chloride	0.1 M Sodium acetate pH 4.6	30% (v/v) MPD		136201-84
85	H1		0.1 M Sodium acetate pH 4.5	35% (v/v) MPD		136201-85
86	H2		0.1 M Sodium acetate pH 4.5	20% (w/v) PEG 3000		136201-86
87	H3	0.2M Sodium dihydrogen phosphate		20% (w/v) PEG 3350		136201-87
88	H4	0.05 M Potassium dihydrogen phosphate		20% (w/v) PEG 8000		136201-88
89	H5	0.2 M Sodium chloride	0.1 M Phosphate-citrate pH 4.2	10% (w/v) PEG 3000		136201-89
90	H6		0.1 M Phosphate/citrate pH 4.2	2.0 M Ammonium sulfate		136201-90
91	H7	0.2 M Lithium sulfate	0.1 M Phosphate-citrate pH 4.2	20% (w/v) PEG 1000		136201-91
92	H8		0.1 M Citric Acid pH 2.5	20% (v/v) MPD	4.0	136201-92
93	H9		0.1 M Citric Acid pH 3.5	0.8 M Ammonium sulfate	4.0	136201-93
94	H10	1.0 M Lithium chloride	0.1 M Citric Acid pH 4.0	20% (w/v) PEG 6000	4.0	136201-94
95	H11	1.0 M Lithium chloride	0.1 M Citric Acid pH 4.0	10% (w/v) PEG 6000	4.0	136201-95
96	H12		0.1 M Citric Acid pH 4.0	5% (w/v) PEG 6000	4.0	136201-96



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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