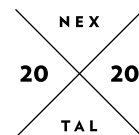


THE JCSG CORE II SUITE

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.

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



NeXtal

THE JCSG CORE II SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
1	A1	0.2 M Sodium chloride	0.1 M CAPS pH 10.5	20% (w/v) PEG 8000		136301-01
2	A2	0.2 M Sodium chloride	0.1 M CHES pH 9.5	1.26 M Ammonium sulfate		136301-02
3	A3	1.0 M Sodium citrate	0.1 M CHES pH 9.5			136301-03
4	A4	0.2 M Sodium chloride	0.1 M CHES pH 9.5	10% (w/v) PEG 8000		136301-04
5	A5		0.1 M Bicine pH 9.0	10% (w/v) PEG 20000; 2% (v/v) 1,4-Dioxane		136301-05
6	A6	0.1 M Sodium chloride	0.1 M Bicine pH 9.0	20% (w/v) PEG 550 MME		136301-06
7	A7	1.0 M Lithium chloride	0.1 M Bicine pH 9.0	10% (w/v) PEG 6000	9.0	136301-07
8	A8		0.1 M Tris pH 8.5	5% (w/v) PEG 8000; 20% (v/v) PEG 300; 10% (v/v) Glycerol		136301-08
9	A9	0.01 M Nickel chloride	0.1 M Tris pH 8.5	20% (w/v) PEG 2000 MME		136301-09
10	A10		0.1 M Tris pH 8.5	20% (v/v) Ethanol		136301-10
11	A11		0.1 M Tris-HCl pH 8.5	2.0 M Ammonium dihydrogen phosphate		136301-11
12	A12		0.1 M Tris-HCl pH 8.5	8% (w/v) PEG 8000		136301-12
13	B1		0.1 M Tris-HCl pH 8.5	2.0 M Ammonium sulfate		136301-13
14	B2	0.2 M Lithium sulfate	0.1 M Tris pH 8.5	40% (v/v) PEG 400		136301-14
15	B3	0.2 M Calcium acetate	0.1 M Imidazole pH 8.0	10% (w/v) PEG 8000		136301-15
16	B4	0.2 M Magnesium chloride	0.1 M Imidazole pH 8.0	35% (v/v) MPD		136301-16
17	B5	1.0 M Lithium chloride	0.1 M Tris pH 8.5	20% (w/v) PEG 6000	8.0	136301-17
18	B6		0.1 M Tris pH 8.5	20% (w/v) PEG 6000	8.0	136301-18
19	B7	0.2 M Lithium Acetate		20% (w/v) PEG 3350		136301-19
20	B8	0.2 M Magnesium chloride	0.1 M Imidazole pH 8.0	40% (v/v) MPD		136301-20
21	B9	0.2 M Magnesium chloride	0.1 M HEPES pH 7.5	15% (v/v) Ethanol		136301-21
22	B10		0.1 M HEPES pH 7.5	70% (v/v) MPD		136301-22
23	B11		0.085 M Sodium HEPES pH 7.5	17% (w/v) PEG 4000; 15% (v/v) Glycerol; 8.5% (v/v) Isopropanol		136301-23
24	B12	0.6 M sodium dihydrogen phosphate/0.6 M potassium dihydrogen phosphate	0.075 M Sodium HEPES pH 7.5	25% (v/v) Glycerol		136301-24
25	C1	0.18 M Magnesium chloride	0.09 M Sodium HEPES pH 7.5	27% (v/v) PEG 400; 10% (v/v) Glycerol		136301-25
26	C2		0.1 M Sodium HEPES pH 7.5	2% (v/v) PEG 400; 2.0 M Ammonium sulfate		136301-26
27	C3	0.2 M Magnesium chloride	0.1 M Sodium HEPES pH 7.5	30% (v/v) PEG 400		136301-27
28	C4	0.2 M Sodium chloride	0.1 M Na/K phosphate pH 6.2	50% (v/v) PEG 200		136301-28
29	C5	0.2 M Sodium fluoride		20% (w/v) PEG 3350		136301-29
30	C6	0.2 M Lithium sulfate	0.1 M Tris pH 7.0	2.0 M Ammonium sulfate		136301-30
31	C7	0.2 M Calcium acetate	0.1 M Sodium cacodylate pH 6.5	40% (v/v) PEG 300		136301-31
32	C8		0.1 M Tris pH 7.0	20% (w/v) PEG 1000		136301-32
33	C9	1.0 M Lithium chloride	0.1 M HEPES pH 7.0	10% (w/v) PEG 6000	7.0	136301-33
34	C10		0.1 M HEPES pH 6.5	10% (w/v) PEG 6000	7.0	136301-34
35	C11	0.2 M Sodium chloride	0.1 M Na/K phosphate pH 6.2	40% (v/v) PEG 400		136301-35
36	C12		0.1 M Sodium citrate pH 5.5	50% (v/v) PEG 200		136301-36
37	D1		0.1 M Na/K phosphate pH 6.2	25% (v/v) 1,2-Propanediol; 10% (v/v) Glycerol		136301-37
38	D2	0.2 M Sodium nitrate		20% (w/v) PEG 3350		136301-38
39	D3	0.05 M Lithium sulfate	0.1 M Tris pH 7.0	50% (v/v) PEG 200		136301-39
40	D4	0.2 M Potassium sulfate		20% (w/v) PEG 3350		136301-40
41	D5	0.2 M Magnesium formate				136301-41
42	D6		0.1 M Sodium citrate pH 5.5	40% (v/v) PEG 600		136301-42
43	D7	0.2 M Magnesium chloride	0.1 M Sodium cacodylate pH 6.5	20% (w/v) PEG 1000		136301-43
44	D8	0.2 M Magnesium chloride	0.1 M Sodium cacodylate pH 6.5	10% (w/v) PEG 3000		136301-44
45	D9	0.2 M Lithium sulfate	0.1 M Sodium cacodylate pH 6.5	30% (v/v) PEG 400		136301-45
46	D10	0.2 M Sodium chloride	0.1 M Sodium cacodylate pH 6.5	2.0 M Ammonium sulfate		136301-46
47	D11		0.1 M MES pH 6.5	12% (w/v) PEG 20000		136301-47
48	D12	0.2 M Lithium sulfate		20% (w/v) PEG 3350		136301-48



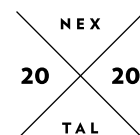
THE JCSG CORE II SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
49	E1	0.2 M Sodium chloride	0.1 M Na/K phosphate pH 6.2	20% (w/v) PEG 1000		136301-49
50	E2		0.1 M MES pH 5.0	10% (v/v) MPD	6.0	136301-50
51	E3	1.0 M Lithium chloride	0.1 M MES pH 6.0	20% (w/v) PEG 6000	6.0	136301-51
52	E4	1.0 M Lithium chloride	0.1 M MES pH 6.0	10% (w/v) PEG 6000	6.0	136301-52
53	E5		0.1 M MES pH 5.0	5% (w/v) PEG 6000	6.0	136301-53
54	E6	0.2 M Zinc acetate	0.1M Imidazole pH 8.0	25% (v/v) 1,2-Propanediol; 10% (v/v) Glycerol		136301-54
55	E7	0.2 M Zinc acetate	0.1M Imidazole pH 8.0	40% (v/v) PEG 600		136301-55
56	E8	0.5 M Ammonium sulfate	0.1M Tris pH 7.0	30% (v/v) PEG 600; 10% (v/v) Glycerol		136301-56
57	E9	1.0 M Lithium sulfate	0.1 M Sodium citrate pH 5.6	0.5 M Ammonium sulfate		136301-57
58	E10	0.2 M Ammonium acetate	0.1 M Sodium citrate pH 5.6	30% (w/v) PEG 4000		136301-58
59	E11			24% (w/v) PEG 1500; 20% (v/v) Glycerol		136301-59
60	E12	0.2 M Sodium chloride	0.1M Sodium acetate pH 4.5	40% (v/v) PEG 300		136301-60
61	F1		0.1M Sodium acetate pH 4.5	35% (v/v) MPD; 10% (v/v) Glycerol		136301-61
62	F2		0.1M Phosphate-citrate pH 4.2	40% (v/v) PEG 300		136301-62
63	F3		0.1M Sodium acetate pH 4.5	5% (w/v) PEG 1000; 50% (v/v) Ethylene glycol		136301-63
64	F4	0.1 M Sodium chloride	0.1M Sodium acetate pH 4.5	30% (v/v) PEG 200		136301-64
65	F5		0.1M Sodium acetate pH 4.5	40% (v/v) 1,2-Propanediol		136301-65
66	F6		0.1M Sodium acetate pH 4.5	40% (v/v) Ethylene glycol		136301-66
67	F7		0.1 M Sodium acetate pH 5.0	10% (v/v) MPD	5.0	136301-67
68	F8		0.1 M Citric acid pH 4.0	2.4 M Ammonium sulfate	5.0	136301-68
69	F9		0.1 M Citric acid pH 4.0	1.6 M Ammonium sulfate	5.0	136301-69
70	F10		0.1 M Citric acid pH 4.0	0.8 M Ammonium sulfate	5.0	136301-70
71	F11	1.0 M Lithium chloride	0.1 M Citric acid pH 5.0	20% (w/v) PEG 6000	5.0	136301-71
72	F12		0.1M Phosphate-citrate pH 4.2	5% (w/v) PEG 3000; 25% (v/v) 1,2-Propanediol; 10% (v/v) Glycerol		136301-72
73	G1			2.0 M Ammonium sulfate; 5% (v/v) Isopropanol		136301-73
74	G2			2.0 M Ammonium sulfate		136301-74
75	G3	0.2 M Magnesium chloride	0.1M MES pH 5.5	40% (v/v) PEG 400		136301-75
76	G4	0.01 M Cobalt chloride	0.1 M Sodium acetate pH 4.6	1.0 M Hexanediol		136301-76
77	G5		0.08 M Sodium acetate pH 4.6	1.6M Ammonium sulfate; 20% (v/v) Glycerol		136301-77
78	G6		0.07 M Sodium acetate pH 4.6	5.6% (w/v) PEG 4000; 30% (v/v) Glycerol		136301-78
79	G7	0.14 M Calcium chloride	0.07 M Sodium acetate pH 4.6	30% (v/v) Glycerol; 14% (v/v) Isopropanol		136301-79
80	G8	0.16 M Ammonium sulfate	0.08 M Sodium acetate pH 4.6	20% (w/v) PEG 4000; 20% (v/v) Glycerol		136301-80
81	G9	0.018 M Calcium chloride	0.09 M Sodium acetate pH 4.6	27% (v/v) MPD; 10% (v/v) Glycerol		136301-81
82	G10		0.1 M Sodium acetate pH 4.6	2.0 M Ammonium sulfate		136301-82
83	G11	0.2 M Zinc acetate	0.1 M Sodium acetate pH 4.5	10% (w/v) PEG 3000		136301-83
84	G12	0.2 M Ammonium sulfate	0.1M Phosphate-citrate pH 4.2	20% (v/v) PEG 300; 10% Glycerol		136301-84
85	H1	0.2 M Calcium acetate	0.1 M Sodium acetate pH 4.5	30% (v/v) PEG 400		136301-85
86	H2	0.2 M Lithium sulfate	0.1 M Sodium acetate pH 4.5	30% (w/v) PEG 8000		136301-86
87	H3			25% (v/v) Ethylene glycol		136301-87
88	H4	0.2 M Lithium sulfate	0.1 M Phosphate-citrate pH 4.2	10% (v/v) Isopropanol		136301-88
89	H5	0.2 M Sodium chloride	0.1 M Phosphate-citrate pH 4.2	20% (w/v) PEG 8000		136301-89
90	H6			10% (w/v) PEG 1000; 10% (w/v) PEG 8000		136301-90
91	H7	0.17 M Ammonium sulfate		25.5% (w/v) PEG 4000; 15% (v/v) Glycerol		136301-91
92	H8			30% (w/v) PEG 1500		136301-92
93	H9	0.4 M Ammonium dihydrogen phosphate				136301-93
94	H10			35% (v/v) 1,4-Dioxane		136301-94
95	H11		0.1 M Citric acid pH 2.5	10% (v/v) MPD	4.0	136301-95
96	H12		0.1 M Citric acid pH 2.5	20% (w/v) PEG 6000	4.0	136301-96



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



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

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