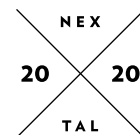


# *THE JCSG CORE IV SUITE*

**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 IV SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
1	A1	0.2 M Lithium sulfate	0.1 M CAPS pH 10.5	2.0 M Ammonium sulfate		136501-01
2	A2	0.2 M Lithium sulfate	0.1 M Glycine pH 10.5	1.2M Sodium dihydrogen phosphate/0.8M di-Potassium hydrogen phosphate		136501-02
3	A3		0.1M CAPS pH 10.5	40% (v/v) MPD		136501-03
4	A4		0.1 M CHES pH 9.5	10% (w/v) PEG 3000		136501-04
5	A5	0.2 M Lithium sulfate	0.1 M CHES pH 9.5	1.0 M Sodium/Potassium tartrate		136501-05
6	A6		0.1 M CHES pH 9.5	30% (v/v) PEG 400		136501-06
7	A7		0.1 M CHES pH 9.5	15% (v/v) Ethanol		136501-07
8	A8	0.2 M Sodium citrate	0.1M CHES pH 9.5	40% (v/v) PEG 300		136501-08
9	A9		0.1M CHES pH 9.5	40% (v/v) MPD		136501-09
10	A10		0.1 M Bicine pH 9.0	1.6 M Ammonium sulfate	9.0	136501-10
11	A11		0.1 M Bicine pH 9.0	0.8 M Ammonium sulfate	9.0	136501-11
12	A12		0.1 M Bicine pH 9.0	2.4 M Ammonium sulfate	9.0	136501-12
13	B1		0.1 M Bicine pH 8.5	10% (w/v) PEG 6000	9.0	136501-13
14	B2		0.1 M Bicine pH 9.0	2.4 M Ammonium sulfate		136501-14
15	B3		0.1 M Bicine pH 8.5	30% (w/v) PEG 6000	9.0	136501-15
16	B4		0.1 M Bicine pH 8.5	65% (v/v) MPD	9.0	136501-16
17	B5		0.1 M Bicine pH 9.0	2.0 M Magnesium chloride		136501-17
18	B6		0.1 M Tris pH 8.5	10% (v/v) Isopropanol		136501-18
19	B7	0.2 M Magnesium chloride	0.1M Tris pH 8.5	50% (v/v) Ethylene glycol		136501-19
20	B8	0.2 M Magnesium chloride	0.1M Tris pH 8.5	25% (v/v) 1,2-Propanediol; 10% (v/v) Glycerol		136501-20
21	B9	0.2 M Magnesium chloride	0.1 M Tris-HCl pH 8.5	30% (w/v) PEG 4000		136501-21
22	B10	0.2 M Sodium citrate	0.1 M Tris-HCl pH 8.5	30% (v/v) PEG 400		136501-22
23	B11	0.2 M Lithium sulfate	0.1 M Tris-HCl pH 8.5	30% (w/v) PEG 4000		136501-23
24	B12	0.2 M Ammonium acetate	0.1 M Tris-HCl pH 8.5	30% (v/v) Isopropanol		136501-24
25	C1		0.1 M Tris pH 8.5	1.5M Ammonium sulfate; 12% (v/v) Glycerol		136501-25
26	C2	0.18 M tri-Sodium citrate	0.09 M TRIS.HCl pH 8.5	27% (v/v) PEG 400; 10% (v/v) Glycerol		136501-26
27	C3	0.17 M Sodium acetate	0.085 M Tris-HCl pH 8.5	25.5% (w/v) PEG 4000; 15% (v/v) Glycerol		136501-27
28	C4		0.1 M Imidazole pH 8.0	10% (v/v) Isopropanol		136501-28
29	C5	0.2 M Zinc acetate	0.1 M Imidazole pH 8.0	2.5 M Sodium chloride		136501-29
30	C6		0.1 M Imidazole pH 8.0	2.5 M Sodium chloride		136501-30
31	C7		0.1 M Imidazole pH 8.0	10% (w/v) PEG 8000		136501-31
32	C8	0.2 M Sodium chloride	0.1 M Imidazole pH 8.0	1.0 M di-Ammonium phosphate		136501-32
33	C9		0.1 M Tris pH 8.5	1.6 M Ammonium sulfate	8.0	136501-33
34	C10		0.1 M Tris pH 8.5	5% (w/v) PEG 6000	8.0	136501-34
35	C11		0.1 M Tris pH 8.5	65% (v/v) MPD	8.0	136501-35
36	C12	1.0 M Lithium chloride	0.1 M Tris pH 8.5	10% (w/v) PEG 6000	8.0	136501-36
37	D1		0.1 M Tris pH 8.0	3.2 M Ammonium sulfate		136501-37
38	D2		0.1 M HEPES pH 7.5	1.26 M Ammonium sulfate		136501-38
39	D3	0.2 M Sodium chloride	0.1 M HEPES pH 7.5	35% (v/v) MPD		136501-39
40	D4		0.1M HEPES pH 7.5	50% (v/v) PEG 200		136501-40
41	D5		0.1 M HEPES pH 7.5	1.5 M Lithium sulfate		136501-41
42	D6		0.1 M HEPES pH 7.5	4.3 M Sodium chloride		136501-42
43	D7	0.2 M Sodium citrate	0.1 M HEPES pH 7.5	30% (v/v) MPD		136501-43
44	D8		0.1 M HEPES pH 7.5	20% (w/v) PEG 10000; 8% (v/v) Ethylene glycol		136501-44
45	D9		0.09 M HEPES pH 7.5	1.26M tri-Sodium citrate; 10% (v/v) Glycerol		136501-45
46	D10	1.7 M Ammonium sulfate	0.085 M HEPES pH 7.5	1.7% (v/v) PEG 400; 15% (v/v) Glycerol		136501-46
47	D11	0.05 M Lithium sulfate	0.1M HEPES pH 7.5	30% (v/v) PEG 600; 10% (v/v) Glycerol		136501-47
48	D12		0.1M HEPES pH 7.5	30% (v/v) 1,2-Propanediol; 20% (v/v) PEG 400		136501-48



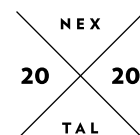
# THE JCSG CORE IV SUITE COMPOSITION TABLE

#	Well	Salt	Buffer	Precipitant	Final pH	Refill-Hit Solution SKU
49	E1	0.2 M Ammonium sulfate	0.1M Tris pH 7.0	25%(v/v) 1,2-Propanediol; 10%(v/v) Glycerol		136501-49
50	E2		0.1M HEPES pH 7.5	5%(w/v) PEG3000; 40%(v/v) Ethyleneglycol		136501-50
51	E3	0.2 M Ammonium sulfate	0.1M Tris pH 7.0	40% (v/v) MPD		136501-51
52	E4			4.0 M Sodium formate		136501-52
53	E5			3.6 M Sodium formate; 10% (v/v) Glycerol		136501-53
54	E6	0.2 M Calcium acetate	0.1M HEPES pH 7.5	40% (v/v) PEG 400		136501-54
55	E7	0.2 M Sodium chloride	0.1 M Tris pH 7.0	30% (w/v) PEG 3000		136501-55
56	E8	0.2 M Lithium sulfate	0.1 M Tris pH 7.0	1.0 M Sodium/Potassium tartrate		136501-56
57	E9	0.2 M Calcium acetate	0.1M Sodium cacodylate pH 6.5	40% (v/v) PEG 600		136501-57
58	E10		0.1 M HEPES pH 6.5	0.8 M Ammonium sulfate	7.0	136501-58
59	E11		0.1 M HEPES pH 7.0	3.2 M Ammonium sulfate		136501-59
60	E12		0.1 M HEPES pH 6.5	30% (w/v) PEG 6000	7.0	136501-60
61	F1	1.0 M Lithium chloride	0.1 M HEPES pH 7.0			136501-61
62	F2	1 M Sodium chloride	0.1M Sodium cacodylate pH 6.5	30% (v/v) PEG 600; 10% (v/v) Glycerol		136501-62
63	F3	0.2 M Zinc acetate	0.1 M Sodium cacodylate pH 6.5	10% (v/v) Isopropanol		136501-63
64	F4	0.2 M Calcium acetate	0.1M Sodium cacodylate pH 6.5	45% (v/v) Glycerol		136501-64
65	F5		0.1 M HEPES pH 7.0	30% (v/v) Jeffamine M-600	7.0	136501-65
66	F6	0.1 M Sodium dihydrogen phosphate/ 0.1 M potassium dihydrogen phosphate	0.1 M MES pH 6.5	2.0 M Sodium chloride		136501-66
67	F7	0.16 M Zinc acetate	0.08M Sodium cacodylate pH 6.5	14.4%(w/v) PEG8000; 20%(v/v) Glycerol		136501-67
68	F8		0.1M Sodium citrate pH 5.5	30%(v/v) 1,2-Propanediol; 20%(v/v) MPD		136501-68
69	F9	0.2 M Zinc acetate		20% (w/v) PEG 3350		136501-69
70	F10		0.1M Sodium citrate pH 5.5	5%(w/v) PEG 1000; 35%(v/v) Isopropanol		136501-70
71	F11		0.1M MES pH 6.0	30% (v/v) PEG 600; 5% (w/v) PEG 1000; 10% (v/v) Glycerol		136501-71
72	F12		0.1M Sodium citrate pH 5.5	40% (v/v) MPD		136501-72
73	G1	0.2 M Zinc acetate	0.1M Imidazole pH 8.0	35% (v/v) Isopropanol		136501-73
74	G2		0.1 M MES pH 6.0	1.0 M Sodium/Potassium tartrate		136501-74
75	G3	0.2 M Lithium sulfate	0.1 M MES pH 6.0	20% (v/v) Butanediol		136501-75
76	G4	0.2 M Zinc acetate	0.1 M MES pH 6.0	15% (v/v) Ethanol		136501-76
77	G5		0.1 M MES pH 5.0	1.6 M Ammonium sulfate	6.0	136501-77
78	G6		0.1 M MES pH 5.0	30% (w/v) PEG 6000	6.0	136501-78
79	G7	0.2 M Zinc acetate	0.1M Imidazole pH 8.0	40% (v/v) PEG 300		136501-79
80	G8	0.2 M Ammonium acetate	0.1 M Sodium citrate pH 5.6	30% (v/v) MPD		136501-80
81	G9	0.01 M Iron(III)chloride	0.1 M Sodium citrate pH 5.6	10% (v/v) Jeffamine M-600		136501-81
82	G10	0.7 M Ammonium dihydrogen phosphate	0.07 M Sodium citrate pH 5.6	30% (v/v) Glycerol		136501-82
83	G11	0.2 M Lithium sulfate	0.1 M Sodium citrate pH 5.5	15% (v/v) Ethanol		136501-83
84	G12	0.05 M Calcium acetate	0.1M Sodium acetate pH 4.5	40% (v/v) 1,2-Propanediol		136501-84
85	H1		0.1M Sodium acetate pH 4.5	35% (v/v) Isopropanol		136501-85
86	H2	0.2 M Ammonium acetate	0.1 M Sodium acetate pH 4.6	30% (w/v) PEG 4000		136501-86
87	H3	0.17 M Ammonium acetate	0.085 M Sodium acetate pH 4.6	25.5%(w/v) PEG4000; 15%(v/v) Glycerol		136501-87
88	H4	0.2 M Zinc acetate	0.1 M Sodium acetate pH 4.5	20% (w/v) PEG 1000		136501-88
89	H5		0.1 M Sodium acetate pH 4.5	1.0 M di-Ammonium phosphate		136501-89
90	H6		0.1 M Sodium acetate pH 4.5	0.8M Sodium dihydrogen phosphate/1.2M di-Potassium hydrogen phosphate		136501-90
91	H7	0.2 M Ammonium sulfate	0.1M Phosphate-citrate pH 4.2	40% (v/v) Ethylene glycol		136501-91
92	H8			10% (v/v) Ethanol; 1.5 M Sodium chloride		136501-92
93	H9			1.5M Ammonium sulfate; 25%(v/v) Glycerol		136501-93
94	H10		0.1 M Phosphate-citrate pH 4.2	1.6M Sodium dihydrogen phosphate/0.4M di-Potassium hydrogen phosphate		136501-94
95	H11		0.1 M Citric Acid pH 2.5	30% (w/v) PEG 6000	4.0	136501-95
96	H12	1.0 M Lithium chloride	0.1 M Citric Acid	30% (w/v) PEG 6000	4.0	136501-96



### 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 CompAS Suite
- The PACT Suite
- The Nucleix Suite
- The JCSG+ Suite
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