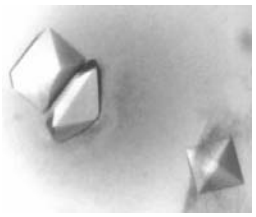
The JCSG Core Suite III

For initial screening using an optimized set of conditions



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.

(1) 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.

Location of Refill-Hit Solutions in 24-Well and 96-Well Plate Formats

	1	2	3	4	5	6
A	1	2	3	4	5	6
B	7	8	9	10	11	12
C	13	14	15	16	17	18
D	19	20	21	22	23	24

24-well plate 1 of 4

	1	2	3	4	5	6
A	49	50	51	52	53	54
B	55	56	57	58	59	60
C	61	62	63	64	65	66
D	67	68	69	70	71	72

24-well plate 3 of 4

	1	2	3	4	5	6	7	8	9	10	11	12
A	1	2	3	4	5	6	7	8	9	10	11	12
B	13	14	15	16	17	18	19	20	21	22	23	24
C	25	26	27	28	29	30	31	32	33	34	35	36
D	37	38	39	40	41	42	43	44	45	46	47	48
E	49	50	51	52	53	54	55	56	57	58	59	60
F	61	62	63	64	65	66	67	68	69	70	71	72
G	73	74	75	76	77	78	79	80	81	82	83	84
H	85	86	87	88	89	90	91	92	93	94	95	96

96-well plate

	1	2	3	4	5	6
A	25	26	27	28	29	30
B	31	32	33	34	35	36
C	37	38	39	40	41	42
D	43	44	45	46	47	48

24-well plate 2 of 4

	1	2	3	4	5	6
A	73	74	75	76	77	78
B	79	80	81	82	83	84
C	85	86	87	88	89	90
D	91	92	93	94	95	96

24-well plate 4 of 4

QIAGEN®

JCSG Core Suite III Refill-Hit Solutions (4 x 12.5 ml tubes)

Number	Salt	Buffer	Precipitant	Cat. no.
1		0.1 M CAPS pH 10.5	30% PEG 400	136401
2		0.1M CHES pH 9.5	40% (v/v) PEG 600	136402
3		0.1M CHES pH 9.5	50% (v/v) PEG 200	136403
4		0.1 M CHES pH 9.5	30% PEG 3000	136404
5	0.2 M Sodium chloride	0.1M CHES pH 9.5	50% PEG 400	136405
6		0.2 M di-Potassium hydrogen Phosphate	20% (w/v) PEG 3350	136406
7		0.2 M di-Sodium hydrogen Phosphate dihydrate	20% (w/v) PEG 3350	136407
8		0.1 M Bicine pH 9.0	40% (±)-2-Methyl-2,4-Pentanediol	136408
9		0.1 M Bicine pH 9.0	5% PEG 6000	136409
10		0.1M CAPS pH 10.5	30% (v/v) PEG 200, 0.2 M Ammonium sulfate	136410
11		0.1 M Tris pH 8.5	20% PEG 1000	136411
12		0.1 M Tris pH 8.5	1.0 M Ammonium dihydrogen phosphate	136412
13	0.2 M Magnesium chloride	0.1 M Tris pH 8.5	20% PEG 8000	136413
14	0.2 M Lithium sulfate	0.1 M Tris pH 8.5	1.26 M Ammonium sulfate	136414
15	1.0 M Lithium sulfate, 0.01 M Nickel chloride	0.1 M Tris pH 8.5		136415
16	1.6 M Ammonium dihydrogen phosphate,	0.08 M Tris pH 8.5	20% Glycerol	136416
17	0.2 M Sodium acetate	0.1 M Tris pH 8.5	30% PEG 4000	136417
18	0.1 M Imidazole pH 8.0	1.0 M Sodium citrate		136418
19	0.2 M Magnesium chloride	0.1 M Imidazole pH 8.0	15% Ethanol	136419
20	0.2 M Lithium sulfate	0.1 M Imidazole pH 8.0	10% PEG 3000,	136420
21		0.1 M Tris pH 8.0	40% (±)-2-Methyl-2,4-Pentanediol	136421
22	2.4 M Ammonium sulfate	0.1 M Tris pH 8.0		136422
23		0.2 M di-Ammonium hydrogen Phosphate	20% (w/v) PEG 3350	136423
24	0.2 M Sodium chloride	0.1 M HEPES pH 7.5	30% PEG 400	136424
25	0.05 M Calcium acetate	0.1M Imidazole pH 8.0	35% 2-ethoxyethanol	136425
26	0.2 M tri-Sodium citrate	0.1 M HEPES pH 7.5	10% Isopropanol	136426
27	0.1 M Sodium chloride	0.1 M HEPES pH 7.5	1.6 M Ammonium sulfate	136427
28	0.18 M Magnesium chloride	0.09 M HEPES pH 7.5	10% Glycerol, 27% Isopropanol	136428
29	1.4 M tri-Sodium citrate	0.1 M HEPES pH 7.5		136429
30	0.2 M Calcium chloride	0.1 M HEPES pH 7.5	28% PEG 400	136430
31	0.2 M Magnesium chloride	0.1 M HEPES pH 7.5	30% Isopropanol	136431
32		0.1M Imidazole pH 8.0	40% (v/v) PEG 400	136432
33	10% (v/v) Glycerol	0.1M HEPES pH 7.5	5% (w/v) PEG 3000, 30% (v/v) PEG 400	136433
34	1.0 M Sodium citrate, 0.2 M Sodium chloride	0.1 M Tris pH 7.0		136434
35		0.1 M Tris pH 7.0	15% Ethanol	136435
36	0.2 M Sodium chloride	0.1 M Tris pH 7.0	35% (±)-2-Methyl-2,4-Pentanediol	136436
37	1.0 M Potassium/Sodium tartrate, 0.2M Sodium chloride	0.1M Imidazole pH 8.0		136437
38		0.1 M HEPES pH 7.0	40% (±)-2-Methyl-2,4-Pentanediol	136438
39		0.1 M HEPES pH 7.0	20% (±)-2-Methyl-2,4-Pentanediol	136439
40		1.0 M Imidazole pH 7.0		136440
41		0.4 M Potassium/Sodium tartrate		136441
42		0.1 M HEPES pH 7.0	2.4 M Ammonium sulfate	136442
43	1.0 M Lithium chloride	0.1 M HEPES pH 7.0	20% PEG 6000	136443
44		0.1 M HEPES pH 7.0	5% PEG 6000	136444
45		0.1M Cacodylate pH 6.5	35% 2-Ethoxyethanol	136445
46		0.1M Tris pH 7.0	50% (v/v) PEG 200	136446
47	0.2 M Sodium chloride	0.1M Sodium/Potassium phosphate pH 6.2	35% (v/v) 2-Ethoxyethanol	136447
48	1.0 M Sodium citrate	0.1 M cacodylate pH 6.5		136448

JCSG Core Suite III Refill-Hit Solutions (4 x 12.5 ml tubes)

Number	Salt	Buffer	Precipitant	Cat. no.
49		0.1 M cacodylate pH 6.5	1.26 M Ammonium sulfate	136449
50	0.01 M Cobalt chloride	0.1 M MES pH 6.5	1.8 M Ammonium sulfate	136450
51		0.1 M MES pH 6.5	1.6 M Ammonium sulfate, 10% Dioxane	136451
52	1.6 M Magnesium sulfate	0.1 M MES pH 6.5		136452
53	0.16 M Calcium acetate	0.08 M Cacodylate pH 6.5	14.4% PEG 8000, 20% Glycerol	136453
54	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	30% (±)-2-Methyl-2,4-Pentanediol	136454
55	0.16 M Magnesium acetate	0.08 M Sodium cacodylate pH 6.5	16% PEG 8000, 20% Glycerol	136455
56	0.2 M Calcium acetate	0.1 M Cacodylate pH 6.5	18% PEG 8000	136456
57	0.2 M Sodium acetate	0.1 M Sodium cacodylate pH 6.5	30% PEG 8000	136457
58	1.0 M Sodium Acetate	0.1 M Imidazole pH 6.5		136458
59	0.2 M Magnesium acetate	0.1 M Sodium cacodylate pH 6.5	30% (±)-2-Methyl-2,4-Pentanediol	136459
60	1.4 M Sodium Acetate	0.1 M Cacodylate pH 6.5		136460
61		0.1M MES pH 6.0	40% PEG 400, 5% (w/v) PEG 3000	136461
62		0.1M Citrate pH 5.5	35% 2-ethoxyethanol	136462
63		0.1 M Sodium/Potassium phosphate pH 6.2	35% (±)-2-Methyl-2,4-Pentanediol	136463
64	2.5 M Sodium chloride	0.1 M Sodium/Potassium phosphate pH 6.2		136464
65	0.2 M Calcium acetate	0.1 M MES pH 6.0	10% Isopropanol	136465
66		0.1 M MES pH 6.0	10% PEG 8000	136466
67		0.1 M MES pH 6.0	2.4 M Ammonium sulfate	136467
68		0.1 M MES pH 6.0	2.4 M Ammonium sulfate	136468
69		0.1 M MES pH 6.0	0.8 M Ammonium sulfate	136469
70	0.1 M citrate pH 5.6	0.2 M Potassium/Sodium tartrate	2.0 M Ammonium sulfate	136470
71	0.17 M Ammonium acetate	0.085 M Sodium citrate pH 5.6	25.5% PEG 4000, 15% Glycerol	136471
72	1.0 M Ammonium dihydrogen phosphate	0.1 M Citrate pH 5.6		136472
73		0.1 M citrate pH 5.5	2.0 M Ammonium sulfate	136473
74		0.1M Acetate pH 4.5	40% (v/v) PEG 400	136474
75		0.1M Tris pH 7.0	40% (v/v) PEG 300, 5% (w/v) PEG 1000	136475
76		0.1M Phosphate-citrate pH 4.2	40% PEG 600	136476
77	0.2 M Calcium Chloride dihydrate		20% (w/v) PEG 3350	136477
78		0.1 M Sodium Acetate trihydrate pH 5.0	40% (±)-2-Methyl-2,4-Pentanediol	136478
79	1.0 M Lithium chloride	0.1 M Citric Acid pH 5.0		136479
80		0.1 M Citric Acid pH 5.0	30% PEG 6000	136480
81		0.04 M KH2PO4	16% PEG 8000, 20% Glycerol	136481
82	0.1 M Cadmium chloride	0.1 M Sodium acetate pH 4.6	30% PEG 400	136482
83	0.2 M Sodium chloride	0.1 M Sodium Acetate pH 4.6	30% (±)-2-Methyl-2,4-Pentanediol	136483
84	2.0 M Sodium chloride	0.1 M Sodium acetate pH 4.6		136484
85	2.0 M Sodium formate	0.1 M Sodium acetate pH 4.6		136485
86	0.2 M Calcium chloride	0.1 M Acetate pH 4.6	20% Isopropanol	136486
87	2.5 M Sodium chloride, 0.2 M Lithium sulfate	0.1 M acetate pH 4.5		136487
88		0.1 M acetate pH 4.5	20% Butanediol	136488
89	0.2 M Sodium chloride	0.1 M acetate pH 4.5	1.26 M Ammonium sulfate	136489
90		0.26 M Ammonium dihydrogen phosphate	35% Glycerol	136490
91		0.1 M Citric Acid pH 4.0	40% (±)-2-Methyl-2,4-Pentanediol	136491
92		0.1 M Citric Acid pH 4.0	2.4 M Ammonium sulfate	136492
93		0.1 M Citric Acid pH 4.0	1.6 M Ammonium sulfate	136493
94	2.0 M Sodium chloride		10% PEG 6000	136494
95			30% PEG 4000, 0.2 M Ammonium sulfate	136495
96			30% PEG 8000, 0.2 M Ammonium sulfate	136496

Protein Crystallization Suites and Formats

	EasyXtal Tool X-Seal	EasyXtal DG Tool X-Seal	EasyXtal Microplate	NeXtal Tubes	NeXtal Deep-Well Block
$AmSO_4$ Suite	■	■	■	■	■
Anions Suite	■	■	■	■	■
Classics Suite	■	■	■	■	■
Classics II Suite	■	■	■	■	■
Classics Lite Suite	■	■	■	■	■
ComPAS Suite	■	■	■	■	■
Cryos Suite	■	■	■	■	■
JCSG Core Suites					■
JCSG+ Suite	■	■	■	■	■
MbClass Suite		■	■	■	■
MbClass II Suite		■	■	■	■
MPD Suite		■	■	■	■
Nucleix Suite	■	■	■	■	■
Opti Salts Suite	■	■	■		
PACT Suite	■	■	■	■	■
PEGs II Suite	■	■	■	■	■
PEGs Suite	■	■	■	■	■
pHClear II Suite	■	■	■	■	■
pHClear Suite	■	■	■	■	■
Protein Complex Suite	■	■	■	■	■
Pre-Screen Assay		■			

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