



**Precipitant Synergy™ Primary 64 crystallization screen - technical sheet**

**Formulations: (Patent Pending)**

Highlighted formulations have been reformulated as of 10/12/2005

	<b>Precipitant #1</b>	<b>Precipitant #2</b>	<b>Additive</b>	<b>Buffer</b>	
1	2M ammonium sulfate	2%(v/v) PEG 400		0.1M acetate pH 5.5	1
2	2M ammonium sulfate	10%(v/v) glycerol	0.05M MgSO4	0.1M imidazole pH 6.5	2
3	2M ammonium sulfate	1%(v/v) MPD		0.1M HEPES pH 7.5	3
4	2M ammonium sulfate	5%(v/v) PEG 400	0.05M MgSO4	0.1M Tris base pH 8.5	4
5	3.9M NaCl	2%(v/v) PEG 400	0.1M MgCl2	0.1M acetate pH 5.5	5
6	3M NaCl	5%(v/v) MPD	0.1M CaCl2	0.1M imidazole pH 6.5	6
7	4M NaCl	5%(v/v) isopropanol		0.1M HEPES pH 7.5	7
8	5%(v/v) isopropanol			2.5M K2 H phosphate/Na H2 phosphate pH 5.5	8
9	2%(v/v) PEG 400			2M K2 H phosphate/Na H2 phosphate pH 6.5	9
10	20%(v/v) glycerol			2.5M K2 H phosphate/Na H2 phosphate pH 7.5	10
11	8%(v/v) MPD			1M K2 H phosphate/Na H2 phosphate pH 8.5	11
12	1%(v/v) MPD			2M (NH4)3 citrate/citric acid pH 4.5	12
13	5%(v/v) isopropanol			2M (NH4)3 citrate/citric acid pH 6.5	13
14	5%(v/v) PEG 400			2M (NH4)3 citrate/citric acid pH 7.5	14
15	2M lithium sulfate	5%(v/v) isopropanol	0.1M MgSO4	0.1M acetate pH 4.5	15
16	2M lithium sulfate	5%(v/v) PEG 400	0.1M MgSO4	0.1M acetate pH 5.5	16
17	1.7M lithium sulfate	6.8%(v/v) MPD		0.085M imidazole pH 6.5	17
18	2M lithium sulfate	2%(v/v) PEG 400		0.1M Tris base pH 8.5	18
19	0.95M lithium sulfate	14.25%(v/v) MPD	0.095M MgSO4	0.095M acetate pH 4.5	19
20	22.5%(v/v) MPD			0.675M (NH4)3 citrate/citric acid pH 5.5	20
21	1.5M ammonium sulfate	12%(v/v) isopropanol		0.1M imidazole pH 6.5	21
22	1.3M NaCl	30%(v/v) isopropanol	0.1M CaCl2	0.1M imidazole pH 6.5	22
23	4M NaCl	10%(v/v) PEG 400		0.1M HEPES pH 7.5	23
24	20%(v/v) PEG 400			0.5M K2 H phosphate/Na H2 phosphate pH 7.5	24
25	15%(v/v) isopropanol			1M (NH4)3 citrate/ammonium hydroxide pH 8.5	25
26	2M sodium formate	15%(v/v) isopropanol	2.5%(w/v) PEG 3350	0.1M Tris base pH 8.5	26
27	30%(v/v) MPD	25%(w/v) PEG 1500		0.1M acetate pH 4.5	27
28	30%(v/v) MPD	15%(w/v) PEG 8000	0.1M CaCl2	0.1M acetate pH 5.5	28
29	30%(v/v) MPD	10%(w/v) PEG 3350	.2M ammonium sulfate	0.1M imidazole pH 6.5	29
30	30%(v/v) MPD	4%(w/v) PEG 1500		0.1M HEPES pH 7.5	30
31	30%(v/v) MPD	8%(w/v) PEG 8000	.5M NaCl	0.1M Tris base pH 8.5	31
32	30%(v/v) isopropanol	4%(w/v) PEG 3350	0.1M CaCl2	0.1M acetate pH 4.5	32
33	30%(v/v) isopropanol	10%(w/v) PEG 1500	0.2M lithium sulfate	0.1M acetate pH 5.5	33
34	40%(v/v) isopropanol	15%(w/v) PEG 8000		0.1M imidazole pH 6.5	34
35	20%(v/v) isopropanol	15%(w/v) PEG 3350		0.2M (NH4)3 citrate/citric acid pH 7.5	35
36	30%(v/v) isopropanol	30%(w/v) PEG 3350		0.1M Tris base pH 8.5	36
37	40%(v/v) PEG 400	20%(w/v) PEG 8000		0.1M acetate pH 4.5	37
38	40%(v/v) PEG 400	5%(w/v) PEG 3350		0.1M acetate pH 5.5	38
39	20%(v/v) PEG 400	15%(w/v) PEG 1000		0.15M K2 H phosphate/Na H2 phosphate pH 6.5	39
40	40%(v/v) PEG 400	8%(w/v) PEG 8000		0.1M HEPES pH 7.5	40
41	25%(v/v) PEG 400	20%(w/v) PEG 3350	0.1M MgCl2	0.1M Tris base pH 8.5	41
42	30%(w/v) PEG 1500	3%(v/v) MPD	0.2M MgSO4	0.1M acetate pH 5.5	42
43	30%(w/v) PEG 1500	10%(v/v) isopropanol	0.1M CaCl2	0.1M imidazole pH 6.5	43
44	30%(w/v) PEG 1500	20%(v/v) PEG 400		0.1M HEPES pH 7.5	44
45	30%(w/v) PEG 1500	8%(v/v) MPD		0.1M Tris base pH 8.5	45
46	25%(w/v) PEG 3350	15%(v/v) isopropanol		0.2M (NH4)3 citrate/citric acid pH 4.5	46
47	25%(w/v) PEG 3350	5%(v/v) PEG 400		0.1M acetate pH 5.5	47
48	25%(w/v) PEG 3350	15%(v/v) MPD	0.2M lithium sulfate	0.1M imidazole pH 6.5	48
49	25%(w/v) PEG 3350	4%(v/v) isopropanol	0.1M CaCl2	0.1M HEPES pH 7.5	49
50	20%(w/v) PEG 8000	10%(v/v) PEG 400	0.5M NaCl	0.1M acetate pH 5.5	50
51	20%(w/v) PEG 8000	3%(v/v) MPD		0.1M imidazole pH 6.5	51
52	20%(w/v) PEG 8000	10%(v/v) isopropanol	0.2M ammonium sulfate	0.1M HEPES pH 7.5	52
53	20%(w/v) PEG 8000	20%(v/v) PEG 400	0.1M MgCl2	0.1M Tris base pH 8.5	53
54	2.1M sodium formate	25%(w/v) PEG 3350	0.1M CaCl2	0.1M acetate pH 4.5	54
55	.75M ammonium sulfate	7.5%(w/v) PEG 3350	5%(v/v) isopropanol	0.1M acetate pH 4.5	55
56	1%(w/v) PEG 4000			1M (NH4)3 citrate/citric acid pH 5.5	56
57	2.5M NaCl	12%(w/v) PEG 1500	1.500 %(v/v) MPD	0.1M acetate pH 5.5	57
58	2M NaCl	20%(w/v) PEG 3350	0.1M MgCl2	0.1M imidazole pH 6.5	58
59	3M sodium formate	4%(w/v) PEG 8000		0.1M imidazole pH 6.5	59
60	0.5%(w/v) PEG 4000			1M K2 H phosphate/Na H2 phosphate pH 7.5	60
61	11.67%(w/v) PEG 3350			0.5M K2 H phosphate/Na H2 phosphate pH 7.5	61
62	2%(w/v) PEG 8000			0.5M (NH4)3 citrate/ammonium hydroxide pH 8.5	62
63	2M NaCl	5%(w/v) PEG 4000		0.1M Tris base pH 8.5	63
64	15%(w/v) PEG 8000			0.5M (NH4)3 citrate/ammonium hydroxide pH 8.5	64

All formulations are made with ultrapure ASTM Type I water and sterile-filtered stock solutions. Store at 4-25 °C.

**Note: These formulations contain chemicals that are at or near their maximum solubility. If precipitation occurs, gently warm prior to use.**