

Sample: \_\_\_\_\_

Sample Concentration: \_\_\_\_\_

1 Clear Drop

Sample Buffer: \_\_\_\_\_

Date: \_\_\_\_\_

2 Phase Separation

Reservoir Volume: \_\_\_\_\_

Temperature: \_\_\_\_\_

3 Regular Granular Precipitate

Drop Volume: Total \_\_\_\_\_  $\mu$ l Sample \_\_\_\_\_  $\mu$ l Reservoir \_\_\_\_\_  $\mu$ l Additive \_\_\_\_\_  $\mu$ l

4 Birefringent Precipitate or

Microcrystals

5 Posettes or Spherulites

6 Needles (1D Growth)

7 Plates (2D Growth)

8 Single Crystals (3D Growth &lt; 0.2 mm)

9 Single Crystals (3D Growth &gt; 0.2 mm)

## Crystal Screen HT™ - HR2-130 Scoring Sheet

Date:	Date:	Date:
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1. (A1) 0.02 M Calcium chloride dihydrate, 0.1 M Sodium acetate trihydrate pH 4.6, 30% v/v (+/-)-2-Methyl-2,4-pentanediol
2. (A2) 0.4 M Potassium sodium tartrate tetrahydrate
3. (A3) 0.4 M Ammonium phosphate monobasic
4. (A4) 0.1 M TRIS hydrochloride pH 8.5, 2.0 M Ammonium sulfate
5. (A5) 0.2 M Sodium citrate tribasic dihydrate, 0.1 M HEPES sodium pH 7.5, 30% v/v (+/-)-2-Methyl-2,4-pentanediol
6. (A6) 0.2 M Magnesium chloride hexahydrate, 0.1 M TRIS hydrochloride pH 8.5, 30% w/v Polyethylene glycol 4,000
7. (A7) 0.1 M Sodium cacodylate trihydrate pH 6.5, 1.4 M Sodium acetate trihydrate
8. (A8) 0.2 M Sodium citrate tribasic dihydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 30% v/v 2-Propanol
9. (A9) 0.2 M Ammonium acetate, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 30% w/v Polyethylene glycol 4,000
10. (A10) 0.2 M Ammonium acetate, 0.1 M Sodium acetate trihydrate pH 4.6, 30% w/v Polyethylene glycol 4,000
11. (A11) 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 1.0 M Ammonium phosphate monobasic
12. (A12) 0.2 M Magnesium chloride hexahydrate, 0.1 M HEPES sodium pH 7.5, 30% v/v 2-Propanol
13. (B1) 0.2 M Sodium citrate tribasic dihydrate, 0.1 M TRIS hydrochloride pH 8.5, 30% v/v Polyethylene glycol 400
14. (B2) 0.2 M Calcium chloride dihydrate, 0.1 M HEPES sodium pH 7.5, 28% v/v Polyethylene glycol 400
15. (B3) 0.2 M Ammonium sulfate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 30% w/v Polyethylene glycol 8,000
16. (B4) 0.1 M HEPES sodium pH 7.5, 1.5 M Lithium sulfate monohydrate
17. (B5) 0.2 M Lithium sulfate monohydrate, 0.1 M TRIS hydrochloride pH 8.5, 30% w/v Polyethylene glycol 4,000
18. (B6) 0.2 M Magnesium acetate tetrahydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 20% w/v Polyethylene glycol 8,000
19. (B7) 0.2 M Ammonium acetate, 0.1 M TRIS hydrochloride pH 8.5, 30% v/v 2-Propanol
20. (B8) 0.2 M Ammonium sulfate, 0.1 M Sodium acetate trihydrate pH 4.6, 25% w/v Polyethylene glycol 4,000
21. (B9) 0.2 M Magnesium acetate tetrahydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 30% v/v (+/-)-2-Methyl-2,4-pentanediol
22. (B10) 0.2 M Sodium acetate trihydrate, 0.1 M TRIS hydrochloride pH 8.5, 30% w/v Polyethylene glycol 4,000
23. (B11) 0.2 M Magnesium chloride hexahydrate, 0.1 M HEPES sodium pH 7.5, 30% v/v Polyethylene glycol 400
24. (B12) 0.2 M Calcium chloride dihydrate, 0.1 M Sodium acetate trihydrate pH 4.6, 20% v/v 2-Propanol
25. (C1) 0.1 M Imidazole pH 6.5, 1.0 M Sodium acetate trihydrate
26. (C2) 0.2 M Ammonium acetate, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 30% v/v (+/-)-2-Methyl-2,4-pentanediol
27. (C3) 0.2 M Sodium citrate tribasic dihydrate, 0.1 M HEPES sodium pH 7.5, 20% v/v 2-Propanol
28. (C4) 0.2 M Sodium acetate trihydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 30% w/v Polyethylene glycol 8,000
29. (C5) 0.1 M HEPES sodium pH 7.5, 0.8 M Potassium sodium tartrate tetrahydrate
30. (C6) 0.2 M Ammonium sulfate, 30% w/v Polyethylene glycol 8,000
31. (C7) 0.2 M Ammonium sulfate, 30% w/v Polyethylene glycol 4,000
32. (C8) 2.0 M Ammonium sulfate
33. (C9) 4.0 M Sodium formate
34. (C10) 0.1 M Sodium acetate trihydrate pH 4.6, 2.0 M Sodium formate
35. (C11) 0.1 M HEPES sodium pH 7.5, 0.8 M Sodium phosphate monobasic monohydrate, 0.8 M Potassium phosphate monobasic
36. (C12) 0.1 M TRIS hydrochloride pH 8.5, 8% w/v Polyethylene glycol 8,000
37. (D1) 0.1 M Sodium acetate trihydrate pH 4.6, 8% w/v Polyethylene glycol 4,000
38. (D2) 0.1 M HEPES sodium pH 7.5, 1.4 M Sodium citrate tribasic dihydrate
39. (D3) 0.1 M HEPES sodium pH 7.5, 2% v/v Polyethylene glycol 400, 2.0 M Ammonium sulfate
40. (D4) 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 20% v/v 2-Propanol, 20% w/v Polyethylene glycol 4,000
41. (D5) 0.1 M HEPES sodium pH 7.5, 10% v/v 2-Propanol, 20% w/v Polyethylene glycol 4,000
42. (D6) 0.05 M Potassium phosphate monobasic, 20% w/v Polyethylene glycol 8,000
43. (D7) 30% w/v Polyethylene glycol 1,500
44. (D8) 0.2 M Magnesium formate dihydrate
45. (D9) 0.2 M Zinc acetate dihydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 18% w/v Polyethylene glycol 8,000
46. (D10) 0.2 M Calcium acetate hydrate, 0.1 M Sodium cacodylate trihydrate pH 6.5, 18% w/v Polyethylene glycol 8,000
47. (D11) 0.1 M Sodium acetate trihydrate pH 4.6, 2.0 M Ammonium sulfate
48. (D12) 0.1 M TRIS hydrochloride pH 8.5, 2.0 M Ammonium phosphate monobasic

Sample: \_\_\_\_\_ Sample Concentration: \_\_\_\_\_  
 Sample Buffer: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reservoir Volume: \_\_\_\_\_ Temperature: \_\_\_\_\_  
 Drop Volume: Total \_\_\_\_\_  $\mu$ l Sample \_\_\_\_\_  $\mu$ l Reservoir \_\_\_\_\_  $\mu$ l Additive \_\_\_\_\_  $\mu$ l

1 Clear Drop  
 2 Phase Separation  
 3 Regular Granular Precipitate  
 4 Birefringent Precipitate or Microcrystals  
 5 Posettes or Spherulites  
 6 Needles (1D Growth)  
 7 Plates (2D Growth)  
 8 Single Crystals (3D Growth < 0.2 mm)  
 9 Single Crystals (3D Growth > 0.2 mm)

## Crystal Screen HT™ - HR2-130 Scoring Sheet

49. (E1) 2.0 M Sodium chloride, 10% w/v Polyethylene glycol 6,000			
50. (E2) 0.5 M Sodium chloride, 0.01 M Magnesium chloride hexahydrate, 0.01 M Hexadecyltrimethylammonium bromide			
51. (E3) 25% v/v Ethylene glycol			
52. (E4) 35% v/v 1,4-Dioxane			
53. (E5) 2.0 M Ammonium sulfate, 5% v/v 2-Propanol			
54. (E6) 1.0 M Imidazole pH 7.0			
55. (E7) 10% w/v Polyethylene glycol 1,000, 10% w/v Polyethylene glycol 8,000			
56. (E8) 1.5 M Sodium chloride, 10% v/v Ethanol			
57. (E9) 0.1 M Sodium acetate trihydrate pH 4.6, 2.0 M Sodium chloride			
58. (E10) 0.2 M Sodium chloride, 0.1 M Sodium acetate trihydrate pH 4.6, 30% v/v (+/-)-2-Methyl-2,4-pentanediol			
59. (E11) 0.01 M Cobalt(II) chloride hexahydrate, 0.1 M Sodium acetate trihydrate pH 4.6, 1.0 M 1,6-Hexanediol			
60. (E12) 0.1 M Cadmium chloride hydrate, 0.1 M Sodium acetate trihydrate pH 4.6, 30% v/v Polyethylene glycol 400			
61. (F1) 0.2 M Ammonium sulfate, 0.1 M Sodium acetate trihydrate pH 4.6, 30% w/v Polyethylene glycol monomethyl ether 2,000			
62. (F2) 0.2 M Potassium sodium tartrate tetrahydrate, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 2.0 M Ammonium sulfate			
63. (F3) 0.5 M Ammonium sulfate, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 1.0 M Lithium sulfate monohydrate			
64. (F4) 0.5 M Sodium chloride, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 2% v/v Ethylene imine polymer			
65. (F5) 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 35% v/v tert-Butanol			
66. (F6) 0.01 M Iron(III) chloride hexahydrate, 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 10% v/v Jeffamine® M-600®			
67. (F7) 0.1 M Sodium citrate tribasic dihydrate pH 5.6, 2.5 M 1,6-Hexanediol			
68. (F8) 0.1 M MES monohydrate pH 6.5, 1.6 M Magnesium sulfate heptahydrate			
69. (F9) 0.1 M Sodium phosphate monobasic monohydrate, 0.1 M Potassium phosphate monobasic, 0.1 M MES monohydrate pH 6.5, 2.0 M Sodium chloride			
70. (F10) 0.1 M MES monohydrate pH 6.5, 12% w/v Polyethylene glycol 20,000			
71. (F11) 1.6 M Ammonium sulfate, 0.1 M MES monohydrate pH 6.5, 10% v/v 1,4-Dioxane			
72. (F12) 0.05 M Cesium chloride, 0.1 M MES monohydrate pH 6.5, 30% v/v Jeffamine® M-600®			
73. (G1) 0.01 M Cobalt(II) chloride hexahydrate, 0.1 M MES monohydrate pH 6.5, 1.8 M Ammonium sulfate			
74. (G2) 0.2 M Ammonium sulfate, 0.1 M MES monohydrate pH 6.5, 30% w/v Polyethylene glycol monomethyl ether 5,000			
75. (G3) 0.01 M Zinc sulfate heptahydrate, 0.1 M MES monohydrate pH 6.5, 25% v/v Polyethylene glycol monomethyl ether 550			
76. (G4) 1.6 M Sodium citrate tribasic dihydrate pH 6.5			
77. (G5) 0.5 M Ammonium sulfate, 0.1 M HEPES pH 7.5, 30% v/v (+/-)-2-Methyl-2,4-pentanediol			
78. (G6) 0.1 M HEPES pH 7.5, 10% w/v Polyethylene glycol 6,000, 5% v/v (+/-)-2-Methyl-2,4-pentanediol			
79. (G7) 0.1 M HEPES pH 7.5, 20% v/v Jeffamine® M-600®			
80. (G8) 0.1 M Sodium chloride, 0.1 M HEPES pH 7.5, 1.6 M Ammonium sulfate			
81. (G9) 0.1 M HEPES pH 7.5, 2.0 M Ammonium formate			
82. (G10) 0.05 M Cadmium sulfate hydrate, 0.1 M HEPES pH 7.5, 1.0 M Sodium acetate trihydrate			
83. (G11) 0.1 M HEPES pH 7.5, 70% v/v (+/-)-2-Methyl-2,4-pentanediol			
84. (G12) 0.1 M HEPES pH 7.5, 4.3 M Sodium chloride			
85. (H1) 0.1 M HEPES pH 7.5, 10% w/v Polyethylene glycol 8,000, 8% v/v Ethylene glycol			
86. (H2) 0.1 M HEPES pH 7.5, 20% w/v Polyethylene glycol 10,000			
87. (H3) 0.2 M Magnesium chloride hexahydrate, 0.1 M Tris pH 8.5, 3.4 M 1,6-Hexanediol			
88. (H4) 0.1 M Tris pH 8.5, 25% v/v tert-Butanol			
89. (H5) 0.01 M Nickel(II) chloride hexahydrate, 0.1 M Tris pH 8.5, 1.0 M Lithium sulfate monohydrate			
90. (H6) 1.5 M Ammonium sulfate, 0.1 M Tris pH 8.5, 12% v/v Glycerol			
91. (H7) 0.2 M Ammonium phosphate monobasic, 0.1 M Tris pH 8.5, 50% v/v (+/-)-2-Methyl-2,4-pentanediol			
92. (H8) 0.1 M Tris pH 8.5, 20% v/v Ethanol			
93. (H9) 0.01 M Nickel(II) chloride hexahydrate, 0.1 M Tris pH 8.5, 20% w/v Polyethylene glycol monomethyl ether 2,000			
94. (H10) 0.1 M Sodium chloride, 0.1 M BICINE pH 9.0, 20% v/v Polyethylene glycol monomethyl ether 550			
95. (H11) 0.1 M BICINE pH 9.0, 2.0 M Magnesium chloride hexahydrate			
96. (H12) 0.1 M BICINE pH 9.0, 2% v/v 1,4-Dioxane, 10% w/v Polyethylene glycol 20,000			

Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_

HAMPTON  
RESEARCH  
Solutions for Crystal Growth

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