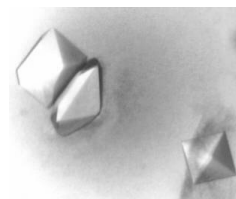


The pHClear II Suite

For screening of protein crystallization conditions



The pHClear II Suite provides:

- A ready-to-use kit format to which only protein needs to be added, for easy and fast screening
- Ideal conditions for an initial screening to define crystallization conditions of a new protein
- Easy analysis of the effect of precipitant concentration and pH
- 96 precisely defined chemical solutions containing the most popular precipitants
- Grids around various concentrations of popular precipitants covering a wide range of pH (4.0 to 9.0)
 - Salts: Na/K phosphate, sodium malonate
 - Polymers: PEG 6000
 - Organics: Isopropanol

The pHClear II Suite is available in a wide range of formats to suit all scales and throughputs.

After viewing initial hit conditions in the pHClear II Suite it is recommended that a complete Suite that contains the relevant precipitant(s) is explored to gain more insight into the behavior of the protein before proceeding with the usual narrower refinement procedures. For example, if a hit is obtained in a condition where PEG 6000 is used as a precipitant, the crystallization conditions should be further explored using the PEGs Suite.

EasyXtal Refill-Hit Solutions can be used to develop grids around the original hit conditions. An overview of the composition of the 96 solutions together with an order number for the corresponding Refill-Hit Solution can be found on pages 2 and 3. The location of each Refill-Hit Solution number is given in the diagram below.

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	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	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
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

	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



The pHClear II Suite Composition Table

Number	Salt	Buffer	Precipitant	pH	Cat. no. (Refill-Hit Solution, 4 x 12.5 ml tubes)
1	1.0 M Lithium chloride	0.1 M Citric acid		4.0	134901
2	1.0 M Lithium chloride	0.1 M Citric acid		5.0	134902
3	1.0 M Lithium chloride	0.1 M MES		6.0	134903
4	1.0 M Lithium chloride	0.1 M HEPES		7.0	134904
5	1.0 M Lithium chloride	0.1 M Tris		8.0	134905
6	1.0 M Lithium chloride	0.1 M Bicine		9.0	134906
7	1.0 M Lithium chloride	0.1 M Citric acid	10% (w/v) PEG 6000	4.0	134907
8	1.0 M Lithium chloride	0.1 M Citric acid	10% (w/v) PEG 6000	5.0	134908
9	1.0 M Lithium chloride	0.1 M MES	10% (w/v) PEG 6000	6.0	134909
10	1.0 M Lithium chloride	0.1 M HEPES	10% (w/v) PEG 6000	7.0	134910
11	1.0 M Lithium chloride	0.1 M Tris	10% (w/v) PEG 6000	8.0	134911
12	1.0 M Lithium chloride	0.1 M Bicine	10% (w/v) PEG 6000	9.0	134912
13	1.0 M Lithium chloride	0.1 M Citric acid	20% (w/v) PEG 6000	4.0	134913
14	1.0 M Lithium chloride	0.1 M Citric acid	20% (w/v) PEG 6000	5.0	134914
15	1.0 M Lithium chloride	0.1 M MES	20% (w/v) PEG 6000	6.0	134915
16	1.0 M Lithium chloride	0.1 M HEPES	20% (w/v) PEG 6000	7.0	134916
17	1.0 M Lithium chloride	0.1 M Tris	20% (w/v) PEG 6000	8.0	134917
18	1.0 M Lithium chloride	0.1 M Bicine	20% (w/v) PEG 6000	9.0	134918
19	1.0 M Lithium chloride	0.1 M Citric acid	30% (w/v) PEG 6000	4.0	134919
20	1.0 M Lithium chloride	0.1 M Citric acid	30% (w/v) PEG 6000	5.0	134920
21	1.0 M Lithium chloride	0.1 M MES	30% (w/v) PEG 6000	6.0	134921
22	1.0 M Lithium chloride	0.1 M HEPES	30% (w/v) PEG 6000	7.0	134922
23	1.0 M Lithium chloride	0.1 M Tris	30% (w/v) PEG 6000	8.0	134923
24	1.0 M Lithium chloride	0.1 M Bicine	30% (w/v) PEG 6000	9.0	134924
25		0.1 M Citric acid	5% (v/v) Isopropanol	4.0	134925
26		0.1 M Citric acid	5% (v/v) Isopropanol	5.0	134926
27		0.1 M MES	5% (v/v) Isopropanol	6.0	134927
28		0.1 M HEPES	5% (v/v) Isopropanol	7.0	134928
29		0.1 M Tris	5% (v/v) Isopropanol	8.0	134929
30		0.1 M Bicine	5% (v/v) Isopropanol	9.0	134930
31		0.1 M Citric acid	10% (v/v) Isopropanol	4.0	134931
32		0.1 M Citric acid	10% (v/v) Isopropanol	5.0	134932
33		0.1 M MES	10% (v/v) Isopropanol	6.0	134933
34		0.1 M HEPES	10% (v/v) Isopropanol	7.0	134934
35		0.1 M Tris	10% (v/v) Isopropanol	8.0	134935
36		0.1 M Bicine	10% (v/v) Isopropanol	9.0	134936
37		0.1 M Citric acid	20% (v/v) Isopropanol	4.0	134937
38		0.1 M Citric acid	20% (v/v) Isopropanol	5.0	134938
39		0.1 M MES	20% (v/v) Isopropanol	6.0	134939
40		0.1 M HEPES	20% (v/v) Isopropanol	7.0	134940
41		0.1 M Tris	20% (v/v) Isopropanol	8.0	134941
42		0.1 M Bicine	20% (v/v) Isopropanol	9.0	134942
43		0.1 M Citric acid	30% (v/v) Isopropanol	4.0	134943
44		0.1 M Citric acid	30% (v/v) Isopropanol	5.0	134944
45		0.1 M MES	30% (v/v) Isopropanol	6.0	134945
46		0.1 M HEPES	30% (v/v) Isopropanol	7.0	134946
47		0.1 M Tris	30% (v/v) Isopropanol	8.0	134947
48		0.1 M Bicine	30% (v/v) Isopropanol	9.0	134948

The pHClear II Suite Composition Table

Number	Salt	Buffer	Precipitant	pH	Cat. no. (Refill-Hit Solution, 4 x 12.5 ml tubes)
49			0.8 M Na/K phosphate	5.0	134949
50			0.8 M Na/K phosphate	5.6	134950
51			0.8 M Na/K phosphate	6.3	134951
52			0.8 M Na/K phosphate	6.9	134952
53			0.8 M Na/K phosphate	7.5	134953
54			0.8 M Na/K phosphate	8.2	134954
55			1.0 M Na/K phosphate	5.0	134955
56			1.0 M Na/K phosphate	5.6	134956
57			1.0 M Na/K phosphate	6.3	134957
58			1.0 M Na/K phosphate	6.9	134958
59			1.0 M Na/K phosphate	7.5	134959
60			1.0 M Na/K phosphate	8.2	134960
61			1.4 M Na/K phosphate	5.0	134961
62			1.4 M Na/K phosphate	5.6	134962
63			1.4 M Na/K phosphate	6.3	134963
64			1.4 M Na/K phosphate	6.9	134964
65			1.4 M Na/K phosphate	7.5	134965
66			1.4 M Na/K phosphate	8.2	134966
67			1.8 M Na/K phosphate	5.0	134967
68			1.8 M Na/K phosphate	5.6	134968
69			1.8 M Na/K phosphate	6.3	134969
70			1.8 M Na/K phosphate	6.9	134970
71			1.8 M Na/K phosphate	7.5	134971
72			1.8 M Na/K phosphate	8.2	134972
73			1.0 M Sodium malonate	4.0	134973
74			1.5 M Sodium malonate	4.0	134974
75			1.9 M Sodium malonate	4.0	134975
76			2.4 M Sodium malonate	4.0	134976
77			2.9 M Sodium malonate	4.0	134977
78			3.4 M Sodium malonate	4.0	134978
79			1.0 M Sodium malonate	5.0	134979
80			1.5 M Sodium malonate	5.0	134980
81			1.9 M Sodium malonate	5.0	134981
82			2.4 M Sodium malonate	5.0	134982
83			2.9 M Sodium malonate	5.0	134983
84			3.4 M Sodium malonate	5.0	134984
85			1.0 M Sodium malonate	6.0	134985
86			1.5 M Sodium malonate	6.0	134986
87			1.9 M Sodium malonate	6.0	134987
88			2.4 M Sodium malonate	6.0	134988
89			2.9 M Sodium malonate	6.0	134989
90			3.4 M Sodium malonate	6.0	134990
91			1.0 M Sodium malonate	7.0	134991
92			1.5 M Sodium malonate	7.0	134992
93			1.9 M Sodium malonate	7.0	134993
94			2.4 M Sodium malonate	7.0	134994
95			2.9 M Sodium malonate	7.0	134995
96			3.4 M Sodium malonate	7.0	134996

Protein Crystallization Suites and Formats

	EasyXtal Microplate	NeXtal Deep- Well Block	EasyXtal DG Tool X-Seal	NeXtal Tubes
The Classics Suite		■	■	■
The Classics Lite Suite		■	■	■
The Classics II Suite		■	■	■
The Cryos Suite		■	■	■
The PEGs Suite		■	■	■
The AmSO ₄ 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	■	■	■	
Pre-Screen Assay			■	

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