

OptiTherm™ Reagents

Well # Row Col	Buffer [#]			Additive		Well # Row Col	Buffer [#]			Additive	
	Conc unit	pH	NAME	Conc unit	Conc unit		Conc unit	pH	NAME	Conc unit	
1 A 1	Glycine	100 mM	3.0			49 E 1	Glycine	50 mM	3.0	Na ₂ SO ₄	500 mM
2 A 2	Citric Acid	100 mM	3.2			50 E 2	Sodium Acetate	50 mM	4.5	Na ₂ SO ₄	500 mM
3 A 3	PIPPS	100 mM	3.7			51 E 3	Bis-Tris	50 mM	6.0	Na ₂ SO ₄	500 mM
4 A 4	Citric Acid	100 mM	4.0			52 E 4	MOPS	50 mM	7.0	Na ₂ SO ₄	500 mM
5 A 5	Sodium Acetate	100 mM	4.5			53 E 5	Imidazole	50 mM	8.0	Na ₂ SO ₄	500 mM
6 A 6	Na/K Phosphate	100 mM	5.0			54 E 6	CHES	50 mM	9.5	Na ₂ SO ₄	500 mM
7 A 7	Sodium Citrate	100 mM	5.5			55 E 7	Citric Acid	50 mM	3.2	Arg/Glu*	50 mM
8 A 8	Na/K Phosphate	100 mM	6.0			56 E 8	Na/K Phosphate	50 mM	5.0	Arg/Glu*	50 mM
9 A 9	Bis-Tris	100 mM	6.0			57 E 9	ADA	50 mM	6.5	Arg/Glu*	50 mM
10 A 10	MES	100 mM	6.2			58 E 10	HEPES	50 mM	7.5	Arg/Glu*	50 mM
11 A 11	ADA	100 mM	6.5			59 E 11	Tris	50 mM	8.5	Arg/Glu*	50 mM
12 A 12	Bis-Tris Propane	100 mM	6.5			60 E 12	CAPS	50 mM	10.0	Arg/Glu*	50 mM
13 B 1	Ammonium Acetate	100 mM	7.0			61 F 1	Glycine	50 mM	3.0	Tween 20	1 % (w/v)
14 B 2	MOPS	100 mM	7.0			62 F 2	Sodium Acetate	50 mM	4.5	Tween 20	1 % (w/v)
15 B 3	Na/K Phosphate	100 mM	7.0			63 F 3	Bis-Tris	50 mM	6.0	Tween 20	1 % (w/v)
16 B 4	HEPES	100 mM	7.5			64 F 4	MOPS	50 mM	7.0	Tween 20	1 % (w/v)
17 B 5	Tris	100 mM	7.5			65 F 5	Imidazole	50 mM	8.0	Tween 20	1 % (w/v)
18 B 6	EPPS	100 mM	8.0			66 F 6	CHES	50 mM	9.5	Tween 20	1 % (w/v)
19 B 7	Imidazole	100 mM	8.0			67 F 7	Citric Acid	50 mM	3.2	Solubilisin™	100 % (w/v)
20 B 8	Bicine	100 mM	8.5			68 F 8	Na/K Phosphate	50 mM	5.0	Solubilisin™	100 % (w/v)
21 B 9	Tris	100 mM	8.5			69 F 9	ADA	50 mM	6.5	Solubilisin™	100 % (w/v)
22 B 10	CHES	100 mM	9.0			70 F 10	HEPES	50 mM	7.5	Solubilisin™	100 % (w/v)
23 B 11	CHES	100 mM	9.5			71 F 11	Tris	50 mM	8.5	Solubilisin™	100 % (w/v)
24 B 12	CAPS	100 mM	10.0			72 F 12	CAPS	50 mM	10.0	Solubilisin™	100 % (w/v)
25 C 1	Glycine	50 mM	3.0	NaCl	150 mM	73 G 1	Glycine	50 mM	3.0	Glycerol	20 % (w/v)
26 C 2	Sodium Acetate	50 mM	4.5	NaCl	150 mM	74 G 2	Sodium Acetate	50 mM	4.5	Glycerol	20 % (w/v)
27 C 3	Bis-Tris	50 mM	6.0	NaCl	150 mM	75 G 3	Bis-Tris	50 mM	6.0	Glycerol	20 % (w/v)
28 C 4	MOPS	50 mM	7.0	NaCl	150 mM	76 G 4	MOPS	50 mM	7.0	Glycerol	20 % (w/v)
29 C 5	Imidazole	50 mM	8.0	NaCl	150 mM	77 G 5	Imidazole	50 mM	8.0	Glycerol	20 % (w/v)
30 C 6	CHES	50 mM	9.5	NaCl	150 mM	78 G 6	CHES	50 mM	9.5	Glycerol	20 % (w/v)
31 C 7	Citric Acid	50 mM	3.2	NaCl	500 mM	79 G 7	Citric Acid	50 mM	3.2	Betaine	2 M
32 C 8	Na/K Phosphate	50 mM	5.0	NaCl	500 mM	80 G 8	Na/K Phosphate	50 mM	5.0	Betaine	2 M
33 C 9	ADA	50 mM	6.5	NaCl	500 mM	81 G 9	ADA	50 mM	6.5	Betaine	2 M
34 C 10	HEPES	50 mM	7.5	NaCl	500 mM	82 G 10	HEPES	50 mM	7.5	Betaine	2 M
35 C 11	Tris	50 mM	8.5	NaCl	500 mM	83 G 11	Tris	50 mM	8.5	Betaine	2 M
36 C 12	CAPS	50 mM	10.0	NaCl	500 mM	84 G 12	CAPS	50 mM	10.0	Betaine	2 M
37 D 1	Glycine	50 mM	3.0	Trehalose	1.0 M	85 H 1	H ₂ O	100 %			
38 D 2	Sodium Acetate	50 mM	4.5	Trehalose	1.0 M	86 H 2	H ₂ O	100 %			
39 D 3	Bis-Tris	50 mM	6.0	Trehalose	1.0 M	87 H 3					
40 D 4	MOPS	50 mM	7.0	Trehalose	1.0 M	88 H 4			AmSulfate	3 M	
41 D 5	Imidazole	50 mM	8.0	Trehalose	1.0 M	89 H 5			Acetonitrile	80 % (v/v)	
42 D 6	CHES	50 mM	9.5	Trehalose	1.0 M	90 H 6	PEG 1450	10 %	NaCl	50 mM	
43 D 7	Citric Acid	50 mM	3.2	TMAO	500 mM	91 H 7			DDT	1 mM	
44 D 8	Na/K Phosphate	50 mM	5.0	TMAO	500 mM	92 H 8			DDT	5 mM	
45 D 9	ADA	50 mM	6.5	TMAO	500 mM	93 H 9			DDT	15 mM	
46 D 10	HEPES	50 mM	7.5	TMAO	500 mM	94 H 10			BME	2.5 mM	
47 D 11	Tris	50 mM	8.5	TMAO	500 mM	95 H 11			BME	10 mM	
48 D 12	CAPS	50 mM	10.0	TMAO	500 mM	96 H 12			BME	20 mM	

Abbreviations: TMAO, Trimethylamine N-Oxide; PIPPS, Piperazine-N, n'-Bis (3-Propanesulfonic Acid); MES, 2-(N-morpholino) ethanesulfonic acid; MOPS, 3-(N-morpholino) propanesulfonic acid; HEPES, 4-(2-hydroxy-ethyl)-1-piperazineethanesulfonic acid; Arg/Glu*: 50mM of each Arginine and Glutamate; DDT, DL-Dithiothreitol; BME, 2-Mercaptoethanol; Betaine, Trimethyl-Glycine; CAPS, N-cyclohexyl-3-amino-propanesulfonic acid; ADA, N-(2-Acetamido)iminodiacetic Acid; Tris, tris(hydroxymethyl)aminomethane; CHES, 2-(N-Cyclohexylamino)ethane Sulfonic Acid; EPPS, N-(2-hydroxyethyl)piperazine-N'-(3-propanesulfonic acid). # pH values for buffers used only; * each amino acid is 50 mM