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A

A1

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.241

A2

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.85

A3

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.0674

A4

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.226

A5

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.0434

A6

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
19.714 µL H2O Well:60 µL

0.27

Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH
Ammonium sulfate				Ammonium sulfate				Ammonium sulfate				Ammonium sulfate				Ammonium sulfate			
2M	34.29			2M	34.29			2M	34.29			2M	34.29			2M	34.29		
tri-Sodium citrate				Sodium acetate				BIS-TRIS				HEPES				TRIS			
0.1M	6		3.5	0.1M	6		4.5	0.1M	6		5.5	0.1M	6		6.5	0.1M	6		8.5

A	<b>A7</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>A8</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>A9</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>A10</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>A11</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>A12</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
	L Vol	L Vol	L Vol	L Vol	L Vol	L Vol
	H Vol	H Vol	H Vol	H Vol	H Vol	H Vol
	pH	pH	pH	pH	pH	pH
B	Sodium chloride 3M	Sodium chloride 3M	Sodium chloride 3M	Sodium chloride 3M	Sodium chloride 3M	Sodium chloride 3M
	tri-Sodium citrate 0.1M	Sodium acetate 0.1M	BIS-TRIS 0.1M	BIS-TRIS 0.1M	HEPES 0.1M	TRIS 0.1M
C	<b>B7</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 39 µL H2O Well:60 µL	<b>B8</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 1.5 µL H2O Well:60 µL	<b>B9</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 16.8 µL H2O Well:60 µL	<b>B10</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 20 µL H2O Well:60 µL	<b>B11</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL	<b>B12</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 18 µL H2O Well:60 µL
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
	L Vol	L Vol	L Vol	L Vol	L Vol	L Vol
	H Vol	H Vol	H Vol	H Vol	H Vol	H Vol
	pH	pH	pH	pH	pH	pH
D	Sodium di-hydrogen phosphate 0.056M	tri-Sodium citrate 1.4M	tri-Ammonium citrate 1.8M	di-Sodium succinate 0.8M	di-Sodium DL-malate 2.1M	Sodium acetate 2.8M
	di-Potassium hydrogen phosphate 1.34M	HEPES 0.1M				
E	<b>C7</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 21.4 µL H2O Well:60 µL	<b>C8</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 35.657 µL H2O Well:60 µL	<b>C9</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 33.988 µL H2O Well:60 µL	<b>C10</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 2.8 µL H2O Well:60 µL	<b>C11</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 36.257 µL H2O Well:60 µL	<b>C12</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 42.6 µL H2O Well:60 µL
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
	L Vol	L Vol	L Vol	L Vol	L Vol	L Vol
	H Vol	H Vol	H Vol	H Vol	H Vol	H Vol
	pH	pH	pH	pH	pH	pH
F	Potassium Sodium tartrate 0.8M	Ammonium sulfate 1M	di-Sodium malonate 1.1M	HEPES 0.1M	Ammonium sulfate 1M	Polyethylene glycol 3,350 2%w/v
	TRIS 0.1M	Polyethylene glycol 3,350 1%w/v	HEPES 0.1M	Polyethylene glycol monomethyl ether 2,000 1%w/v	HEPES 0.1M	HEPES 0.1M
	Polyethylene glycol monomethyl ether 5,000 0.5%w/v	BIS-TRIS 0.1M	Jeffamine ED-2001 0.5%w/v	di-Sodium succinate 1M	Polyethylene glycol 8,000 0.5%w/v	Tacsimate 15%w/v
G	<b>D7</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 24 µL H2O Well:60 µL	<b>D8</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 24 µL H2O Well:60 µL	<b>D9</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 24 µL H2O Well:60 µL	<b>D10</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 30 µL H2O Well:60 µL	<b>D11</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 20.4 µL H2O Well:60 µL	<b>D12</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 21 µL H2O Well:60 µL
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
	L Vol	L Vol	L Vol	L Vol	L Vol	L Vol
	H Vol	H Vol	H Vol	H Vol	H Vol	H Vol
	pH	pH	pH	pH	pH	pH
H	Polyethylene glycol 3,350 25%w/v	Polyethylene glycol 3,350 25%w/v	Polyethylene glycol 3,350 25%w/v	Polyethylene glycol monomethyl ether 5,000 20%w/v	Polyethylene glycol monomethyl ether 2,000 28%w/v	Calcium chloride 0.2M
	BIS-TRIS 0.1M	HEPES 0.1M	TRIS 0.1M	BIS-TRIS 0.1M	BIS-TRIS 0.1M	2-Methyl-2,4-pentanediol 45%w/v
						BIS-TRIS 0.1M

E

1

E1

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
21 µL H2O Well:60 µL

0.0412

Conc.	L Vol	H Vol	pH
Calcium chloride			
0.2M	6		
2-Methyl-2,4-pentanediol			
45%v/v	27		
BIS-TRIS			
0.1M	6		6.5

E2

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
15 µL H2O Well:60 µL

0.351

Conc.	L Vol	H Vol	pH
2-Methyl-2,4-pentanediol			
45%v/v	27		
Ammonium acetate			
0.2M	12		
BIS-TRIS			
0.1M	6		5.5

E3

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
15 µL H2O Well:60 µL

0.0612

Conc.	L Vol	H Vol	pH
2-Methyl-2,4-pentanediol			
45%v/v	27		
Ammonium acetate			
0.2M	12		
BIS-TRIS			
0.1M	6		6.5

E4

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
15 µL H2O Well:60 µL

0.0517

Conc.	L Vol	H Vol	pH
2-Methyl-2,4-pentanediol			
45%v/v	27		
HEPES			
0.1M	6		7.5
Ammonium acetate			
0.2M	12		

E5

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
15 µL H2O Well:60 µL

0.0414

Conc.	L Vol	H Vol	pH
2-Methyl-2,4-pentanediol			
45%v/v	27		
TRIS			
0.1M	6		8.5
Ammonium acetate			
0.2M	12		

E6

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
34.5 µL H2O Well:60 µL

0.216

Conc.	L Vol	H Vol	pH
Calcium chloride			
0.05M	1.5		
Polyethylene glycol monomethyl ether 550			
30%v/v	18		
BIS-TRIS			
0.1M	6		6.5

F

F1

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
30 µL H2O Well:60 µL

0.0389

Conc.	L Vol	H Vol	pH
L-Proline			
0.2M	12		
Polyethylene glycol 3,350			
10%w/v	12		
HEPES			
0.1M	6		7.5

F2

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.0381

Conc.	L Vol	H Vol	pH
Trimethylamine N-oxide			
0.2M	12		
TRIS			
0.1M	6		8.5
Polyethylene glycol monomethyl ether 2,000			
20%w/v	24		

F3

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
39 µL H2O Well:60 µL

0.041

Conc.	L Vol	H Vol	pH
HEPES			
0.1M	6		7
Polyethylene glycol monomethyl ether 5,000			
10%w/v	12		
Tacsimate			
5%w/v	3		

F4

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
38.775 µL H2O Well:60 µL

0.239

Conc.	L Vol	H Vol	pH
Cadmium chloride			
0.005M	0.3		
Cobalt (II) chloride			
0.005M	0.3		
Magnesium chloride			
0.005M	0.15		
Nickel (II) chloride			
0.005M	0.075		
Polyethylene glycol 3,350			
12%w/v	14.4		
HEPES			
0.1M	6		7.5

F5

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
27.6 µL H2O Well:60 µL

0.663

Conc.	L Vol	H Vol	pH
Ammonium acetate			
0.1M	6		
Polyethylene glycol 10,000			
17%w/v	20.4		
BIS-TRIS			
0.1M	6		5.5

F6

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
20.571 µL H2O Well:60 µL

0.219

Conc.	L Vol	H Vol	pH
Ammonium sulfate			
0.2M	3.429		
Polyethylene glycol 3,350			
25%w/v	30		
BIS-TRIS			
0.1M	6		5.5

G

G1

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
21.6 µL H2O Well:60 µL

0.22

Conc.	L Vol	H Vol	pH
Sodium chloride			
0.2M	2.4		
Polyethylene glycol 3,350			
25%w/v	30		
TRIS			
0.1M	6		8.5

G2

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.219

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
25%w/v	30		
Lithium sulfate			
0.2M	6		
BIS-TRIS			
0.1M	6		5.5

G3

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.218

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
25%w/v	30		
Lithium sulfate			
0.2M	6		
BIS-TRIS			
0.1M	6		6.5

G4

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.0378

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
25%w/v	30		
HEPES			
0.1M	6		7.5
Lithium sulfate			
0.2M	6		

G5

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.109

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
25%w/v	30		
TRIS			
0.1M	6		8.5
Lithium sulfate			
0.2M	6		

G6

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
12 µL H2O Well:60 µL

0.217

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
25%w/v	30		
Ammonium acetate			
0.2M	12		
BIS-TRIS			
0.1M	6		5.5

H

H1

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
18 µL H2O Well:60 µL

0.218

Conc.	L Vol	H Vol	pH
Magnesium chloride			
0.2M	6		
Polyethylene glycol 3,350			
25%w/v	30		
TRIS			
0.1M	6		8.5

H2

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
28 µL H2O Well:60 µL

0.0887

Conc.	L Vol	H Vol	pH
Potassium Sodium tartrate			
0.2M	8		
Polyethylene glycol 3,350			
20%w/v	24		

H3

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
32.471 µL H2O Well:60 µL

0.0389

Conc.	L Vol	H Vol	pH
di-Sodium malonate			
0.2M	3.529		
Polyethylene glycol 3,350			
20%w/v	24		

H4

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
31.2 µL H2O Well:60 µL

0.302

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
20%w/v	24		
tri-Ammonium citrate			
0.2M	4.8		

H5

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
32 µL H2O Well:60 µL

0.318

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
15%w/v	18		
di-Sodium succinate			
0.2M	10		

H6

afGGGPS N216A (5 mg/mL)  
Drop: 0.2 µL p + 0.2 µL w + 0 µL s  
34.286 µL H2O Well:60 µL

0.214

Conc.	L Vol	H Vol	pH
Polyethylene glycol 3,350			
20%w/v	24		
Sodium formate			
0.2M	1.714		

<b>E7</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 34.5 µL H2O Well:60 µL				<b>E8</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 12 µL H2O Well:60 µL				<b>E9</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 20.143 µL H2O Well:60 µL				<b>E10</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 27 µL H2O Well:60 µL				<b>E11</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 27 µL H2O Well:60 µL				<b>E12</b> afGGGPS N216A (5 mg/mL) Drop: 0.2 µL p + 0.2 µL w + 0 µL s 29.4 µL H2O Well:60 µL			
<b>0.223</b>				<b>0.038</b>				<b>0.042</b>				<b>0.237</b>				<b>0.0348</b>				<b>0.2</b>			
Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH	Conc.	L Vol	H Vol	pH
Magnesium chloride				Potassium chloride				Ammonium sulfate				Polypropylene glycol 400				Magnesium chloride				Cobalt (II) chloride			
0.05M	1.5			0.2M	3			0.05M	0.8571			45%v/v	27			0.02M	0.6			0.01M	0.6		
HEPES				HEPES				BIS-TRIS				BIS-TRIS				HEPES				Polyvinylpyrrolidone K15			
0.1M	6		7.5	0.05M	3		7.5	0.05M	3		6.5	0.1M	6		6.5	0.1M	6		7.5	20%w/v	24		
Polyethylene glycol monomethyl ether 550				Pentaerythritol Propoxylate (5/4 PO/OH)				Pentaerythritol ethoxylate (15/4 EO/OH)				Poly(acrylic acid sodium salt) 5,100								TRIS			
30%v/v	18			35%v/v	42			30%w/v	36			22%w/v	26.4							0.1M	6		8.5
																				</			